HEINRICH HEINE UNIVERSITÄT DÜSSELDORF

The State Government of North Rhine-Westphalia



# Scholarship Program of the German State of North Rhine-Westphalia for students from Israel

# Call 2019

Scholarship places at institutions of higher education in North Rhine-Westphalia

Please choose the scholarship place(s) you seek to apply for; fill in the online registration form and submit it online.

Please consider the time frames offered by the host universities.

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#### Contacts and further information

Heinrich-Heine-University Duesseldorf International Office Universitaetsstrasse 1 D–40225 Duesseldorf Germany Ms. Leona Schmitz (LL.M.) Phone: +49 (0) 211 / 81 15730 Email: nrw-scholarship@hhu.de

### **Bielefeld University**

Bielefeld University was founded in 1969 with an explicit research assignment and a mission to provide high-quality research-oriented teaching. With far-reaching aims to reform nearly every area of higher education, the University has made valuable contributions to educational reform in Germany and upholds its interdisciplinary, innovative and reform-oriented character to this day. The University encompasses 13 faculties covering a broad spectrum of disciplines in the humanities, natural sciences, social sciences, and technology. With more than 24,000 students in 115 degree courses and around 2,750 staff members (including 269 professors and lecturers as well as 1,390 academic staff) it is one of Germany's medium-sized universities.

Bielefeld - the "university of short ways" and of "interdisciplinary intertwinement"! Whereas elsewhere the departments and institutes are spread all over the city, Bielefeld University is a campus university. Thanks to this compactness, the disciplines are very close to one another and lots of opportunities for interdisciplinary encounter arise. There is even a special-purpose Center for Interdisciplinary Research, the "ZiF."

The I2SoS is an interdisciplinary Institute that is devoted to reflecting on science: scientific method, social epistemology, the impact of science on society, social influences on sciences, economic incentives and their effects on science, science and technology, science and economic development, ethics of science, medical ethics, history of science. The overall focus is on the relation between science and society.

#### http://www.uni-bielefeld.de/%28en%29/i2sos/index.html

Visiting students can take part in all classes in philosophy, history, and economics unless access is restricted (restrictions may apply to economics classes). Accordingly, visiting students are not confined to science-related studies. However, the odds of acceptance are better for students with interests in such studies. The master's program "History, Economics and Philosophy of Science" offers English-language classes (http://www.uni-bielefeld.de/i2sos/heps/international/index.html).

Bielefeld University offers the opportunity of taking a German language course at "PunktUm". Intensive courses (20-30 lessons/week) in March, August and September (before the lecture periods). Courses with four lessons/week during the lecture periods. For more information see: <u>http://www.uni-bielefeld.de/punktum</u>

www.uni-bielefeld.de

#### Contact:

Dr. Thomas Luettenberg, Dezernat III Head/ International Office Universitaetsstr. 25, D–33615 Bielefeld Phone: +49-(0)521/106-4088,

E-mail: thomas.luettenberg@uni-bielefeld.de

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| Institute  | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area  | Bursars' degree<br>program<br>(B = Bachelor; M<br>= Master; P=<br>PhD) |
|--|--|------------------------|--|--|
| Institute for<br>Interdisciplinary Studies<br>of Science | Prof. Dr. Martin<br>Carrier  | 1                      | Philosophy of<br>Science, History of<br>Science,<br>Economics of<br>Scientific<br>Knowledge,<br>Medical Ethics | Μ  |
| Time frame:  | May – December 2019  |                        |  |  |
| Institute's focal research<br>areas                      | <ul> <li>Philosophy of Science, History of Science, Economics of<br/>Scientific Knowledge, Medical Ethics</li> </ul> |                        |  |  |

| Institute                           | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area | Bursars' degree<br>program<br>(B = Bachelor; M<br>= Master; P=<br>PhD) |
|-------------------------------------|--|------------------------|-------------------------------|--|
| Faculty of Physics                  | Prof. Dr. Armin<br>Gölzhäuser  | 1                      | Physics, Chemistry            | B, M   |
| Time frame:                         | May – December 2019  |                        |                               |  |
| Institute's focal research<br>areas | <ul> <li>Supramolecular Physics</li> <li>Chemical Nanolithography</li> <li>Carbon Nanomembranes</li> </ul> |                        |                               |  |

| Institute  | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area   | Bursars' degree<br>program<br>(B = Bachelor; M<br>= Master; P=<br>PhD) |
|--|--|------------------------|---|--|
| Center for Prevention<br>and Intervention<br>in Childhood and<br>Adolescence | Prof. Dr. Ulrich<br>Bauer  | 1                      | Historian/ Political<br>Scientist/<br>Educational<br>Scientist or other<br>suitable for the<br>research subject | Μ  |
| Time frame:  | 01. May until 30. July 2019  |                        |   |  |
| Institute's focal research<br>areas  | <ul> <li>Preparation of a binational research project and on<br/>antisemitism in cartoons on social media.</li> <li>Hate speech on social media</li> </ul> |                        |   |  |

### **Bielefeld University of Applied Sciences**

Five Faculties: Design, Architecture and Civil Engineering and Technology, Engineering and Mathematics, Social Sciences, Business and Health.

Courses are mainly in German (language of instruction)

About 10,000 students enrolled, including approximately 800 international students.

During the *freshers' weeks* (01-29- September 2019) German language courses for guest students are organized for all levels. During the lecture time German courses are not necessarily for all levels available.

During the semester, the Faculty of Business and Health offers German Courses with the

proficiency levels A1, A2, B1, B2, C1 as part of their curricula.

Summer term 2019: 1 April -14 June 2019

Winter term 19/20: 30 September '19 - 10 January '20

**Important information:** In order to benefit from all services the university has to offer (Bus ticket, wifi access, library ID etc.), we generally recommend that scholarship students should be enrolled at our institution for their stay. For technical purposes, this is only possible until 15 November (winter term) or 15 May (summer term). We recommend a scholarship start before these dates.

http://www.fh-bielefeld.de

Contact:Hannah Möhring Contact person for incoming exchange studentsPhone: +49-521/106-70093Fax: +49-521/106-7726E-Mail: hannah.moehring@fh-bielefeld.deBielefeld University of Applied Sciences,Interaktion 1, 33619 Bielefeld, Germany

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| Institute  | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area   | Scholars' degree<br>program (B =<br>Bachelor; M =<br>Master; P =<br>PhD)   |
|--|--|------------------------|---|--|
| Faculty of Business and<br>Health, Department of<br>Business | Prof. Dr. Uwe<br>Rössler<br>Phone: +49-521<br>106-5080<br>E-Mail:<br>uwe.roessler@fh<br>-bielefeld.de                | 1                      | Business<br>Administration,<br>Business<br>Information<br>Systems,<br>Business Law,<br>Business<br>Psychology,<br>International<br>Studies in<br>Management | B, M<br>Bachelor or<br>Master in<br>Business<br>Administration,<br>Business<br>Information<br>Systems,<br>Business Law and<br>Business<br>Psychology |
| Time frame:  | 01. May until 19. July or  |                        |   |  |
|  | 23. September  | until 31.D             | ecember   |  |
| Institute's focal research<br>areas                          | Research questions in Business administration, Business<br>Information Systems, Business Law and Business Psychology |                        |   |  |

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| Institute  | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area  | Scholars' degree<br>program (B =<br>Bachelor; M =<br>Master; P =<br>PhD)  |
|--|---|------------------------|--|---|
| Faculty of Architecture<br>and Civil Engineering | Prof. DrIng.<br>Johannes Weinig<br>Phone: +49 571<br>71195<br>E-Mail:<br>johannes.weinig<br>@fh-bielefeld.de  | 1                      | Civil engineering<br>or architecture<br>Scholarship<br>holders should<br>have previous<br>knowledge in<br>German<br>language | B Architecture<br>B Civil<br>Engineering<br>M Architecture<br>M Civil<br>Engineering<br>(classes only in<br>German<br>language) |
| Time frame:                                      | 01. May untill 19. July or<br>09. September until 31.December   |                        |  |   |
| Institute's focal research<br>areas              | <ul> <li>Surveying methods and skills</li> <li>Construction of plain light buildings (e.g. sports halls or stadiums)</li> <li>Water engineering and water management</li> <li>Micro- and ultra-filtration methods</li> <li>Construction, Energy, Environment:</li> <li>water engineering including water preparation,</li> <li>energetic building restoration with alternative energy concepts</li> </ul> |                        |  | g. sports halls or<br>ment<br>paration,<br>ernative energy  |

### **University of Bonn**

Rheinische Friedrich-Wilhelms-Universität, which belongs to the top Universities in Germany in terms of student's enrolment with particular high international participation, of high quality scientific projects and publications, multifaceted teaching activities. Currently several interdepartmental and interfaculty curricula are involved in innovative educational programs such as "Application of Biotechnology in Medicine" which are open for further interdisciplinary and international co-operations supported by several national foundations and European Union. Since several years, the University of Bonn actively participate in bilateral exchanging programs with Israel. The accumulated experience for both sides is highly positive. The created scientific and personal contacts are of durable nature. Below are listed some selected publications which have been created in collaboration with the Programme-Fellows from Israel:

Free German language classes (4 hours per week **during** the semester) for students who are enrolled at Bonn University.

<u>www.uni-bonn.de</u>

Contact:

Sandra Papel International Office Phone: 0049 (0) 228 739527 E-mail: sandra.papel@uni-bonn.de

| Institute  | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area      | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|--|--|------------------------|------------------------------------|--|
| Head of Division<br>"Molecular /<br>Experimental<br>Radiology" | Prof. Dr. Olga<br>Golubnitchaja<br>Mail:<br><u>Olga.Golubnitschaja</u><br><u>@ukb.uni-bonn.de</u>  | 1                      | Innovative (bio)<br>medical fields | В, М   |
| Time frame:  | August until October (in consultation)   |                        |                                    |  |
| Institute's focal<br>research areas                            | <ul> <li>Multi-omics, Liquid biopsy, Predictive diagnostics,<br/>Targeted prevention, Patient stratification, Artificial intelligence</li> <li>Participation in the EPMA World Congress, September 2019</li> <li>www.epmanet.eu</li> </ul> |                        |                                    |  |

### Ruhr-University Bochum

Ruhr University Bochum (RUB), about 43,000 students, more than 4,000 foreign students; is a modern and innovative university with a wide range of study courses and excellent research institutions, located in one of the most culturally interesting regions in the heart of Europe.

University homepage: <u>www.rub.de</u>

German language classes at RUB start in April (summer term) and October (winter term) each year, they are free of charge: **Fehler! Hyperlink-Referenz ungültig.** 

International Office: www.international.rub.de

Contact:

Ms. Jonna Haensel-Neumann, International Office, SSC 1/249, D-44780 Bochum, Germany phone: +49 234 32 25425, fax: +49 234 32 14684 email: jonna.haensel@uv.rub.de

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| Institute  | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area            | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|--|--|------------------------|--|--|
| Department of Middle<br>Eastern and Islamic<br>Studies | Prof. Johann<br>Buessow<br>(johann.buessow<br>@rub.de)   | 1                      | Middle Eastern<br>and Islamic<br>Studies | B, M   |
| Time frame:  | May – December 2019  |                        |  |  |
| Institute's focal research<br>areas                    | History of the modern Middle East (1500 to the present);<br>intellectual history of the Islamic world (from the mediaeval to<br>the modern period) |                        |  |  |

| Institute   | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area  | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|---|---|------------------------|--|--|
| Chair for<br>Tunnelling and<br>Construction<br>Management | Annika Jodehl,<br>M.Sc.<br>annika.jodehl@ru<br>b.de<br>+49 (0)234 32-<br>21412  | 1                      | Civil<br>Engineering /<br>Environmental<br>Engineering /<br>Geosciences<br>PC knowledge<br>(MS Office)<br>necessary. | M  |
| Time frame:   | October - December (01.10. – 20.12.2019)  |                        |  |  |
| Institute's focal research<br>areas                       | soil conditioning for EPB and slurry shields, process simulation, cost-risk analysis, shotcrete laboratory experiments, tunnel safety, separation of used slurries. |                        | cess simulation,<br>nents, tunnel  |  |

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| Institute                           | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area                      | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|-------------------------------------|---|------------------------|--|--|
| Clinical Neuropsychology            | Prof. Dr. Boris<br>Suchan<br><u>boris.suchan@rub</u><br><u>.de</u>  | 1                      | Neuro-<br>psychology,<br>Cognitive<br>Neuroscience | B, M   |
| Time frame:                         | May – July; October   | r – Deceml             | oer 2019   |  |
| Institute's focal research<br>areas | We have many research topics. We are interested in the processing of faces and bodies in the human brain. We are also interested in the involvement of the medial temporal lobe in the formation of long term memory and also in perception.<br>As techniques, we are using EEG and fMRI. Please take a look at our homepage to get an impression of our research topics (http://www.ruhr-uni-bochum.de/neuropsy/). |                        |  |  |

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| Institute   | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area                  | Scholars' degree<br>program<br>(B = Bachelor;<br>M= Master; P=<br>PhD) |
|---|---|------------------------|--|--|
| Center for Mind &<br>Cognition (formerly,<br>CMBC)<br>Department of<br>Philosophy | Prof. Dr. Markus<br>Werning<br><u>Markus.Werning</u><br>@rub.de<br>Chair of<br>Philosophy of<br>Language and<br>Cognition | 1                      | Philosophy<br>Cognitive Science<br>Linguistics | В, М   |
| Time frame:   | May – July; Septer  | nber – Deo             | cember 2019                                    |  |
| Institute's focal research<br>areas   | Philosophy<br>Cognitive Science<br>Linguistics  |                        |  |  |

| Institute  | Contact at the institute         | Number<br>of<br>places | Discipline or<br>subject area  | Scholars' degree<br>program<br>(B = Bachelor;<br>M= Master; P=<br>PhD) |
|--|----------------------------------|------------------------|--|--|
| Chair for interdisciplinary<br>questions in Philosophy<br>and Theology | PD Dr. Ludger<br>Jansen          | 1                      | Philosophy,<br>Theology,<br>Computer Science,<br>Biology, Medicine,<br>Law | Μ  |
| Time frame:  | May—July 15 <sup>th</sup> , 2019 |                        |  |  |

| Institute's focal research<br>areas | Metaphysics & Philosophy of Science<br>Philosophy of Biology and Medicine,<br>Biomedical Ontology,<br>Social Ontology,   |
|-------------------------------------|--|
|                                     | Possible topics:<br>- the ontology of artificial organisms,<br>- philosophy of biomimetics<br>- evolution and creation<br>- formal-ontological descriptions of religion<br>- faith and reason. |

| Institute                           | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area             | Scholars' degree<br>program<br>(B = Bachelor;<br>M= Master; P=<br>PhD) |
|-------------------------------------|---|------------------------|---|--|
| Institute for Philosophy II         | Prof. Dr. Albert<br>Newen   | 1                      | Theoretical<br>Philosophy:                | M Philosophy   |
|                                     | <u>albert.newen@</u><br><u>rub.de</u> ;   |                        | Mind, Logic,<br>Language,<br>Epistemology | (Courses are in<br>English or<br>German)                               |
|                                     |   |                        | Ancient<br>Philosophy                     |  |
| Time frame:                         | May – December 2019   |                        |   |  |
| Institute's focal research<br>areas | The institute is specialized in Philosophy of Language, Mind and Science. It is also offering Logic and Epistemology. |                        |   |  |

### **Bonn-Rhein-Sieg University of Applied Sciences**

The Bonn-Rhein-Sieg University of Applied Sciences (Hochschule Bonn-Rhein-Sieg - HBRS) was established in 1995 as a national university funded by the government. Traditionally, HBRS attracts applicants from the within its region, but the University has formal and informal cooperation agreements with more than 70 universities throughout the world.

HBRS specializes in business administration, natural sciences, computer science, social security management, technical journalism and engineering. The focus areas for HBRS are applied research and development, technology transfer using international and interdisciplinary approaches. There is an emphasis on internships and practical applications in industry and research and joint research projects with numerous companies and institutions.

As English or another foreign language is a required subject for all students, the university has established a central Language Centre which designs, coordinates and carries out foreign language instruction on all three campuses.

The campuses in Sankt Augustin, Rheinbach and Hennef are well-equipped with modern laboratories, and technical equipment. HBRS has approximately 150 Professors of which many receive research grants. There are about 200 support staff including technical and administrative employees. HBRS currently has around 8000 students and the Department of Natural Sciences recruits approx. 140 undergraduates in Bachelor programs and approx. 30 students in a Master program each year in the study courses Applied Biology (as an international study course) and Chemistry with Material Sciences (as a German study course), amongst others.

Very recently, a new Master program was started in "Material Science and Sustainability Methods" focusing on the development of novel advanced materials for automobile and packaging industry as well as biomedicine and tissue engineering. Teaching languages are German and English (50/50). Students will be involved in research projects including material synthesis, analysis and testing.

Due to the time frame, participation at the regular semester German courses is unfortunately not possible.

www.h-brs.de

| Contact: | Stefanie Fey  |
|----------|---|
|          | Hochschule Bonn-Rhein-Sieg  |
|          | (Bonn-Rhine-Sieg University of Applied Sciences) International Office<br>– Welcome Centre Grantham-Allee 20 |
|          | 53757 Sankt Augustin Germany  |
|          | Tel +49 (0) 2241/865-671  |
|          | Fax +49 (0) 2241/865-8671   |
|          | welcome.centre@h-brs.de   |
|          |   |

| Institute                           | Contact at the institute   | Number<br>of<br>places                                 | Discipline or<br>subject area   | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|-------------------------------------|--|--|---|--|
| Department of Natural<br>Sciences   | Prof. Dr. Edda<br>Tobiasch   | 1  | Biology   | M  |
| Time frame:                         | Arrival: First days<br>stay: 10 weeks  | s of July, A   | ugust or September  | 2019, minimum  |
| Institute's focal research<br>areas | The work deals with human stem cell differentiation and their signalling pathways.   |  |   |  |
|                                     | Overview:  |  |   |  |
|                                     | Recent progress in our understanding of stem cell differentiation<br>and cell transplantation has opened new therapeutic avenues in<br>the treatment of human diseases involving chronic or acute<br>tissue- specific cell loss. Consequently, experimental cell<br>replacement strategies have been attempted involving adult<br>stem cells with the aim of developing therapies.   |  |   |  |
|                                     | Human mesenchymal stem cells which are isolated from adipose<br>tissue have the advantage of potential autologous<br>transplantation ability. There is strong evidence that they can be<br>differentiated in various lineages such as the chondrogenic,<br>osteogenic, adipogenic and myogenic direction. Inductions of the<br>cells into multiple lineages as well as their use in the<br>undifferentiated state already resulted phase I to III clinical<br>studies for various diseases all over the world. |  |   |  |
|                                     | We aim at investigating fat-derived MSC, as potential donor cells, for their ability to differentiate in the osteogenic lineage for future treatment of critical size bone defects and in the adipogenic direction to develop an in vitro model for the onset of atherosclerosis.  |  |   |  |
|                                     | In another project ecto-mensenchymal stem cells derived from dental follicles of wisdom teeth are used to find strategies improving dental implant stability.  |  |   | cells derived from<br>to find strategies                                 |
|                                     | We also differe<br>smooth muscle o   | ntiate the<br>cell for a be                            | e stem cell towards<br>etter understanding  | s endothelial and of angiogenesis.                                       |
|                                     | Other studies inv<br>characterization<br>parts during dif<br>tissues for each o  | volve purir<br>of stem c<br>ferentiatio<br>differentia | nergic receptors and<br>ells derived from va<br>n to find the best<br>tion lineage. | Hox genes for the rious human body suitable cells and                    |

| 1                | More information on the subjects can be found on the nomepage:   |
|------------------|--|
| נ<br>ר<br>s      | The work encompasses the following topics for potential scholarship holder:  |
| •                | <ul> <li>Differentiation and characterization of<br/>adult, human mesenchymal stem cells</li> </ul>  |
| i                | • Determination of the role of the differentiating adipocyte n an in vitro model of stenosis   |
| ā                | <ul> <li>Investigation of purinergic receptors and Hox signalling<br/>and their role in human stem cell differentiation</li> </ul>   |
| •                | <ul> <li>Biocompatibility testing of nano-structured<br/>polymers as scaffolds for 3D tissue engineering</li> </ul>  |
| •                | <ul> <li>Stem cell interaction with natural and artificial scaffolds</li> </ul>  |
| T<br>S<br>T<br>S | <b>The group is composed</b> of the lab leader, a scientist, three PhD<br>students, and several Master- and Bachelor students working on<br>their theses. One of the PhD students will take care for the guest<br>student. |

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| Institute                           | Contact<br>institute  | at the   | Number<br>of<br>places | Discipline or<br>subject area     | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |  |
|-------------------------------------|---|--|------------------------|-----------------------------------|--|--|
| Department of Natural<br>Sciences   | Prof. Dr<br>Schulze<br>Organic<br>Polyme<br>Chemist   | . Margit<br>and<br>r<br>try  | 1                      | Chemistry,<br>Material Science    | В, М   |  |
| Time frame:                         | Arrival:<br>stay: 12  | July 1 <sup>st</sup> , ,<br>weeks  | August 1 <sup>st</sup> | or September 1 <sup>st</sup> , 20 | 019 minimum  |  |
| Institute's focal research<br>areas | <ul> <li>h The work deals with:         <ul> <li>a) development of polymer scaffolds for stem cell differentiation and proliferation</li> <li>b) development of polymers used in regenerative medicir (tissue engineering and drug release)</li> <li>c) development of polymeric materials from renewable resources (biomass)</li> </ul> </li> <li>The work encompasses the following topics for potential scholarship holder:</li> </ul> |  |                        |                                   |  |  |
|                                     |   |  |                        |                                   |  |  |
|                                     | • Synthesis of appropriate polymers (e.g. biopolymers such as microspheres and hydrogels)   |  |                        |                                   |  |  |
|                                     | • Chai  | racterizat   | ion of poly            | /mer structure                    |  |  |
|                                     | Surf  | ace modi   | fication / f           | functionalization                 | upling)  |  |
|                                     | <ul> <li>Bioa</li> <li>Bioc</li> </ul>  | <ul><li>Bioactivation of the scaffolds (e.g. ligand coupling)</li><li>Biocompatibility testing</li></ul> |                        |                                   |  |  |

### **TU Dortmund University**

The TU Dortmund University was established in 1968 and comprises 16 Faculties, Collaborative Research Centres, Graduate Schools & Graduate Colleges, and a number of affiliated institutes as well as other associated and science institutes like Fraunhofer Institutes-and the Max Planck Institute for Molecular Physiology (MPI) The number of students in the fall term WS15 /16 amounted to slightly more than 34.000. The staff consists of 350 professors, 1.900 academics and about 1.300 non-academic staff.

The TU Dortmund University supports interdisciplinary cooperation between its fields of study. To combine and analyze the strengths and activities a program of thematic "research bands" has been developed. The "bands" allow cross-referencing beyond the bounds of single departments, faculties and disciplines.

The TU Dortmund University has set itself an ambitious goal: research, teaching and courses of study are to be given an even more consistently international orientation over the coming years. In addition to its integration within the region, with all its structural changes, the university is deliberately focusing on a second aspect: Within the scope of a comprehensive network of international university partnerships and research co-operations, the TU Dortmund University will strengthen its position among the global players in the field of science.

The university already offers extensive support measures for foreign students. With the regular orientation program "Come2Campus", the Office for International Relations helps international "freshmen" to cope with the new living and learning conditions. Together with the city of Dortmund, the university strives to improve the services provided for foreign students.

A further way of improving the general conditions for successful completion of courses of study for international students is to increase the number of lectures held in English. Building the network connecting the TU Dortmund University with partner institutions in Europe and all over the world has been a priority for decades. A huge number of cooperations among students, academics, institutes and departments, as well as world-wide university partnerships, opens up global thinking for the region and makes the university's achievements and competence available to the scientific community worldwide.

Please notice: there are no German language courses available this year.

**Contact:** 

International Office Dr. Barbara Schneider Emil-Figge-Str. 61, 44227 Dortmund 0231-755 6350 barbara.schneider@tu-dortmund.de

| Institute                                      | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area                               | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |  |
|--|--|------------------------|---|--|--|
| Department for English<br>and American Studies | Prof. Dr. Walter<br>Grünzweig  | 1                      | American Studies;<br>Cultural Studies<br>and related fields | В, М   |  |
| Time frame:                                    | October – December 2019  |                        |   |  |  |
| Institute's focal research<br>areas            | European-American relations, images of the United States, Anti-<br>Americanism, Religion & American Culture, reception of<br>American literature abroad, American political cultures, Exile in<br>the United States, Jewish-American Literature. |                        |   |  |  |

### Heinrich-Heine-University Duesseldorf

Even though the French emperor Napoleon I planned to found a university in Duesseldorf in 1811, with the Rhine area being thought of as an intellectual buffer zone between France and Prussia, Duesseldorf had to wait one more century. In 1907 the Duesseldorf Academy for Applied Medicine was founded and opened together with the newly-built Municipal Hospital, which was at that time the most modern clinical complex in the German Empire. Since the Academy had no university constitution, it was only allowed to instruct medical trainees, not students. The academy itself and part of the population launched several initiatives to change the status of the institution. In 1923 they finally succeeded when a university constitution including the right to train students was given to the Medical Academy of Duesseldorf. The study of dental medicine was subsequently incorporated, and by 1935 even doctoral degrees could be awarded in Duesseldorf.

After World War II the federal state of North Rhine-Westphalia and the City of Duesseldorf signed a contract which stated that the federal state would take over the Medical Academy, while the hospitals remained municipally owned. The Medical Academy became the University of Duesseldorf in November 1965, and in January 1966 it became a university with a medical faculty and a combined faculty of arts and natural sciences. In December 1988 the university senate decided to change the institution's name to Heinrich-Heine University Duesseldorf, in commemoration of one of the city's most renowned sons whose critical and inquisitive, poetic mind reached out across national borders and fought against small-mindedness.

Today the university forms the backbone of Duesseldorf's academic reputation. Faced with nation-wide cuts in university spending, the University of Duesseldorf has continued to thrive. Despite its recent foundation it has gained the reputation usually associated only with universities rich in age and tradition. The university's continuous development has made it home to a distinguished range of subjects, including medical science, natural sciences, economics, law, and the humanities. The degree requirements allow for numerous combinations of subjects, and study programs can be tailored to fit individual needs. Some subjects, such as Literary Translation, Yiddish Culture, Language and Literature, and Media Science, are unique features of our curriculum. Further specialties in the Faculty of Arts include Modern Japan Studies, and German as a Foreign Language which address the needs of the international business community. The Faculty of Economics focuses particularly on International Management. European and International Law enjoy an elevated position at the Faculty of Law, which is also a renowned center of commercial law. Duesseldorf has also become a hub of Biotechnology. The focal points of research within the Faculty of Mathematics and Natural Sciences are Genetics and Molecular Biology.

The Faculty of Medicine has gained a reputation for its research in Cardiology; Cell and Gene Therapy form the backbone of clinical research. The Center of Biomedical Research (BMFZ) stands out as a center of excellence. Several institutions devoted to special fields are attached to the university, for example the Institute of Diabetic Research, and the Medical Institute for Environmental Hygiene. The Institute for International Communication is also located on campus.

Ample proof of the confidence that sponsors place in the research conducted at HHUD can be seen in the number of collaborative research centers and research training programs. The University of Duesseldorf ranks 18th among the top 45 universities (113 in total), which together receive 90% of all project funds granted in Germany.

The university's international profile is the result of the active exchange programs it maintains with partner universities in regions as diverse as California and Peking, Reading and Naples. In any given year, about 3000 foreign students come from more than 110 nations, and over 120 guest academics conduct their research here. The total number of students amounts to approximately 35000. The number of faculty exceeds 1500.

Last but not least, the university has the advantage of occupying a pleasant site. After long hours of study it is tempting to take a stroll through the Botanical Garden located right on campus....

#### www.uni-duesseldorf.de

Language Courses will be provided by the university. At the moment the planning for next year is not yet public. However, every non German speaking student can participate.

Contact:

Ms. Leona Schmitz (LL.M.)

International Office Heinrich-Heine-Universitaet Duesseldorf International Office (Building 21.02)

Universitaetsstraße 1, D–40225 Duesseldorf

Phone: +49-(0)211/81-15730 E-mail: <u>nrw-scholarship@uni-duesseldorf.de</u>

| # | 1 |
|---|---|
|   | _ |

| Institute                           | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area                                    | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |  |  |
|-------------------------------------|---|------------------------|--|--|--|--|
| Institute for Jewish<br>Studies     | Prof. Dr. Marion<br>Aptroot<br><u>aptroot@phil.hhu.</u><br><u>de</u><br>Tel. 81-13228 | 1                      | Yiddish Studies<br>(including inter-<br>disciplinary<br>studies) | B, M   |  |  |
| Time frame:                         | May - December 2019   |                        |  |  |  |  |
| Institute's focal research<br>areas | Yiddish: Yiddish Language, Yiddish Literature and Culture, Yiddish<br>Linguistics     |                        |  |  |  |  |

| Institute                           | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area                                  | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |  |  |
|-------------------------------------|---|------------------------|--|--|--|--|
| Institute for Art History           | Prof. Dr.<br>Andrea von<br>Hülsen-Esch<br><u>Huelsen-</u><br><u>esch@phil.hhu.</u><br><u>de</u>   | 1                      | Art history<br>Knowledge of<br>German language<br>is required. | M  |  |  |
| Time frame:                         | August – December 2019  |                        |  |  |  |  |
| Institute's focal research<br>areas | Materiality, Medieval Sculpture and Treasury Art,<br>Representations of Age(ing) in Art, Art market studies, Jewish<br>Artists at the Beginning oft he 20th Century |                        |  |  |  |  |

| Institute  | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area  | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |  |
|--|---|------------------------|--|--|--|
| Institute for Quantitative<br>Genetics and Genomics<br>of Plants | Prof. Dr. Benjamin<br>Stich   | 1                      | Biology,<br>Bioinformatics,<br>Agricultural<br>sciences or<br>related<br>disciplines | Μ  |  |
| Time frame:  | May 02 <sup>nd</sup> until December 31 <sup>st</sup> , 2019   |                        |  |  |  |
| Institute's focal research<br>areas                              | Population genetic & quantitative genetic analyses, bioinformatic analyses of sequence data, performance of field experiments |                        |  |  |  |

| Institute                                 | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD)  |  |
|---|--|------------------------|-------------------------------|---|--|
| Institute for Competition<br>Law (IKartR) | Akad. Rat a.Z. Dr.<br>Jannik Otto<br>E-Mail:<br><u>jannik.otto@hhu.de</u><br>Tel.: 0049 211/81-<br>10630 | 1                      | Law                           | M<br>Good knowledge<br>of German<br>Language<br>required (Grade B2<br>or higher of the Common<br>European Framework of<br>references for languages) |  |
| Time frame:                               | May 2019 till July 2019  |                        |                               |   |  |

| Institute's focal research<br>areas | The research focus lies in the field of German and European<br>Competition Law including the neighbouring fields of German<br>and International Business Law. Most publications are in<br>German, some in English.  |
|-------------------------------------|---|
|                                     | The applicant should intend to use the scholarship to further<br>his/her own research project which should be in the field of the<br>institute's research focus. Therefore, the applicant is asked to<br>present his/her research project in an exposé. The exposé should<br>contain an overview of the research project and answer the<br>question how German or European law has an impact on the<br>issue. Also, the applicant should explain in how far a visit at the<br>institute would promote the research project. |
|                                     | The applicant will have the opportunity to present his/her<br>research project, to discuss it at the institute and to be given<br>guidance as to questions of German and European law.<br>Nevertheless, it will in principle be expected that the applicant<br>will work on his/her research project independently. It may also<br>be possible for the applicant to become involved in research<br>projects conducted at the institute.   |

| Institute                           | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area                          | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |  |  |
|-------------------------------------|---|------------------------|--|--|--|--|
| Institute for Jewish<br>Studies     | Prof. Dr. Stefan<br>Rohrbacher<br>Tel.: +49-211-<br>8115852<br><u>rohrbacher@phil.hhu</u><br><u>.de</u> | 1                      | Jewish<br>Studies,<br>History<br>(English<br>Language) | Μ  |  |  |
| Time frame:                         | 01 May until 12 July and 01 October until December 31 <sup>st</sup> , 2019                              |                        |  |  |  |  |
| Institute's focal research<br>areas | European Jewish history: Early Modern Era, Modernity; History of Antisemitism                           |                        |  |  |  |  |

| Institute   | Contact at the<br>institute   | Number<br>of<br>places   | Discipline or<br>subject area   | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |  |
|---|---|--|---|--|--|
| Institute for Romance<br>Languages and<br>Literatures, Department<br>I: Literature in Spanish<br>and French | Prof. Dr. Ursula<br>Hennigfeld<br><u>hennigfeld@phil.hhu.</u><br><u>de</u><br>Tel. 0049 211/81-<br>15273                              | 1  | Spanish or<br>French<br>Literature<br>(Minimum<br>required<br>level of<br>language<br>proficiency:<br>B2) | В, М   |  |
| Time frame:   | Optional: max. 12 weeks, either May-July or October-December, 2019  |  |   |  |  |
| Institute's focal research<br>areas   | Spanish, Latin America<br>Studies:<br>- Support of teachin<br>- Collaboration in th<br>Culturales Hispánic<br>Participation in curren | n and/or F<br>g activities<br>e "Centro<br>cos (CeHis)<br>t projects a | French Literatu<br>Interuniversita<br>"<br>and events   | re and Cultural<br>rio de Estudios                                       |  |

### **University of Duisburg-Essen**

Creative inspiration between the Rhine and Ruhr: the University of Duisburg-Essen (UDE) is located in the European region with the highest density of institutions of higher learning. Created in 2003 by the merger of the universities of Duisburg and Essen, the UDE is the youngest university in North Rhine-Westphalia and one of the ten largest universities in Germany. Both campuses are easy to reach and offer some 37,000 students a broad academic spectrum with an international orientation – ranging from the humanities and social sciences to economics and the engineering and natural sciences, including medicine. Students from 130 countries are currently enrolled at the UDE.

In many disciplines the UDE ranks amongst the TOP 10 of German research universities. Over the past three years, research income has risen by 150 %, a development which is also thanks to the five main research areas: Nano sciences, Biomedical Sciences, Urban Systems, Empirical Research in Education, and Change of Contemporary Societies.

www.uni-duisburg-essen.de

http://www.uni-due.de/international/

For free German classes in preparation for one's studies see:

www.uni-due.de/international/deutschkurse.shtml

Contact:

Simone Müller International Office Geibelstr. 41, SG 130 47048 Duisburg Tel:+49-(0)203-379 1062 Email: <u>simone.mueller@uni-due.de</u>

| Institute  | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area                          | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|--|--|------------------------|--|--|
| Department of<br>Neurology<br>Experimental Neurology | Prof. Dr. Dagmar<br>Timmann<br>Hufelandstr. 55<br>45147 Essen<br>Tel: +49 (0)201<br>723 6508<br>Email:<br>dagmar.timmann-<br>braun@uni-<br>due.de<br>Internet:<br>https://neurol<br>ogie.uk-<br>essen.de/unse<br>re-<br>forschung/prof<br>essuren/experi<br>mentelle-<br>neurologie/   | 1                      | Neuroscience,<br>Neuro-<br>psychology,<br>Biomechanics | В, М   |
| Time frame:  | 12 weeks within Ma   | ay – Decen             | nber 2019  |  |
| Institute's focal research<br>areas                  | Clinical Neuroscience; Physiology and pathophysiology of the<br>human cerebellum; Behavioural studies in patients with<br>cerebellar disorders; Structural and functional MRI in patients<br>and controls.<br>Projects will be on reach adaptation in cerebellar disease and<br>studying the effects of transcranial direct-current stimulation<br>(tDCS) on cerebellar deficits; Projects will be done in<br>collaboration with Prof. Opher Donchin, Department of<br>Biomedical Engineering and Zlotowski Center for Neuroscience<br>Ben-Gurion University of the Negev. |                        |  |  |

| Institute                           | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|-------------------------------------|---|------------------------|-------------------------------|--|
| Faculty of Mathematics              | Prof. Dr. V.<br>Paskunas  | 1                      | Arithmetic,<br>Geometry       | M in<br>Mathematics  |
| Time frame:                         | May to December 2019  |                        |                               |  |
| Institute's focal research<br>areas | Representation theory of p-adic groups, Galois representations,<br>Topics in Algebraic Geometry |                        |                               |  |

| Institute  | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area  | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|--|--|------------------------|--|--|
| Department of Adult<br>and Civic Education<br>(Faculty of Educational<br>Sciences) | Tim Zosel<br>(Prof. Helmut<br>Bremer)<br>Phone: +49<br>(0)201 183-6269<br><u>tim.zosel@uni-</u><br><u>due.de</u> | 1                      | humanities,<br>sociology,<br>education<br>appreciated is<br>profound<br>knowledge in at<br>least one of the<br>following<br>subjects: the<br>education<br>system of Israel,<br>Holocaust<br>education in<br>Israel, adult and<br>civic education in<br>Israel, the<br>different socio-<br>ethnic groups in<br>Israel | B, M<br>Required<br>language:<br>English                                 |
| Time frame:  | May to Septembe  | r 2019                 |  |  |

| Institute's focal research<br>areas | <ul> <li>Welcome to Essen and to our Department of Adult and<br/>Civic Education. We are researching and teaching with a<br/>special focus on participation in adult and civic education,<br/>social and political exclusion, theories of civic/citizenship<br/>education, theory of practice and social inequality<br/>(Bourdieu), and learners who are excluded from formal<br/>education.</li> <li>We would like to support you in your project and<br/>exchange ideas regarding our common topics of research.<br/>Furthermore, we offer you to join us in our work on<br/>several projects, especially regarding Israel and Israeli-<br/>German relations. You will be able to join our seminars,<br/>get to know our faculty and university, and bring in your<br/>own perspective. We look forward to welcoming you here<br/>in Essen.</li> </ul> |
|-------------------------------------|--|
|                                     | Required language: English   |

### **Research Center Juelich**

Forschungszentrum Jülich, member of the Helmholtz Association, is one of the major research institutions in Europe.

Key technologies in the areas of energy and environment, information technology, and brain research – this characterizes Forschungszentrum Jülich's profile.

We believe that the key to solving global challenges, such as energy supply technologies or for information technologies of the future, is understanding materials. We investigate materials in the context of systems and processes on different scales, from the atomic to the global level. In this way, we embed our research in the wider context, taking into consideration not only scientific questions, but also social, economic, and ethical issues.

In cooperation with our partners, we develop and use key technologies, such as highperformance computing, to open the door to new applications. In this process, research questions and technological developments are inextricably linked with each other.

We are involved in developing completely new industries, such as the bioeconomy, on the basis of our fundamental scientific research facilitated by our interdisciplinary and international approach.

About 5,900 employees, over 200 cooperation partners in Germany and abroad, a unique infrastructure, and unrivalled expertise in physics, materials science, nanotechnology, and information technology – this is the potential that we exploit in working with future key technologies to develop new solutions in the areas of energy and environment, information and brain research.

Excellent researchers who cooperate across the borders of institutes, research centres, and even countries are Jülich's greatest strength. In order to allow them to collaborate with leading partners throughout the world, Jülich participates in strategic alliances both in Germany and abroad.

Young scientists, undergraduates, and PhD students are central to the intellectually stimulating environment and vitality of the campus. Jülich offers them a working environment with state-of-the-art instruments and international contacts, as well as the opportunity to research independently at an early stage of their career.

Forschungszentrum Jülich is proud of the tools it provides for its researchers to do their work: simulation with supercomputers, research with neutrons, imaging techniques for medicine, nanotechnology tools – these modern instruments facilitate breakthroughs to new horizons of knowledge. This infrastructure, valued and used by researchers throughout the world, characterizes Jülich as the home of key technologies.

German language courses (once a week; 12-14 days per course) of different levels can be visited on campus.

#### Contact:

Gabriele Weiland Corporate Development Department (UE) Forschungszentrum Jülich GmbH D-52425 Jülich, Germany Phone:+49 – (0)2461 – 61.3388 e-mail: <u>g.weiland@fz-juelich.de</u>

| Institute                           | Contact at the institute   | Number<br>of<br>places  | Discipline or<br>subject area  | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |  |
|-------------------------------------|--|---|--|--|--|
| INM-2                               | Prof. Dr. A.<br>Bauer<br>Dr. S. Beer<br>Phone:+49-<br>(0)2461-61-<br>1954; e-mail:<br><u>si.beer@fz-</u><br>juelich.de   | 1   | Physics,<br>Mathematics,<br>Biomedical<br>Engineering,<br>Computer Science | B, M   |  |
| Time frame:                         | 01.1022.12.201   | .9  |  |  |  |
| Institute's focal research<br>areas | n Our research interests involve the methodology for <i>in vivo</i> receptor imaging of brain functions with positron emission tomography (PET) and the combination with complementary imaging modalities like CT and MRI. This includes amongst ot the development and validation of software algorithms and correction methods for high quality image reconstruction, strategies to improve image quantitation accuracy, developm of novel instrumentation for dedicated applications, and simulation and modelling of PET components and systems. |   |  |  |  |
|                                     | The focus for the<br>development of<br>quality and quan<br>PET/MRI. The wo<br>simulation, the d<br>image reconstruc  | e part in the<br>best possible image<br>combined<br>odeling and<br>aging strategies,<br>analysis. |  |  |  |
|                                     | PET is multi-disciplinary, so that the projects offer the<br>opportunity to experience collaborative research and<br>among various disciplines from chemistry, physics, er<br>and mathematics to biology and (pre)clinical research  |   |  |  |  |
|                                     | The hosting group "Molecular Neuroimaging" comprises<br>physicians, biologists, physicists and several technicians.<br>Currently, the working group operates a combined PET/CT<br>scanner for small animal imaging as well as a combined PET/MRI<br>scanner for human imaging.More information is available at<br>http://www.fz-juelich.de/inm/inm-2/  |   |  |  |  |

| Institute   | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area  | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD)  |
|---|---|------------------------|--------------------------------|---|
| Institute of Complex<br>Systems,<br>Forschungszentrum<br>Jülich, 52425 Jülich<br><u>http://www.fz-</u><br>juelich.de/portal/EN/in<br><u>stitutes/InstituteCompl</u><br><u>exSystems/ node.html;</u><br>jsessionid=C85FA5790D<br><u>DF1C43F1B322AB62DE</u><br>D932 | Dr. Thorsten<br>Auth<br>Phone: +49<br>2461<br>61 1735<br><u>t.auth@fz-<br/>juelich.de</u>   | 1                      | Physics,<br>Chemistry, Biology | В, М  |
| Time frame:   | 02.05. – 15.12.20   | 019                    |                                |   |
| Institute's focal research<br>areas   | <ul> <li>The student will perform numerical calculations to study interface-mediated interactions between particles: this can either be interactions between particles at fluid-gas interfaces or interactions of particles that are attached to lipid bilayer membranes. Our main interest are membrane-mediated interactions that are particularly important from a biological point of view. Examples are viral budding, the entry of parasites into cells, and the interaction of nanoparticles bound to cell membranes.</li> <li>From a technical point of view, particles at interfaces and membranes are closely related and can both be studied using triangulated surfaces. We will employ the freely available program package "Surface Evolver". Basic knowledge of Linux, bash scripting, a plotting program (e.g. gnuplot), and a programming language would be helpful, but are not required. The details of the project and the work plan for the student will be adjusted according to the area of study of the applicant.</li> </ul> |                        |                                |   |
|   |   |                        |                                | rfaces and<br>e studied using<br>y available<br>vledge of Linux,<br>), and a<br>re not required.<br>the student will<br>he applicant. |

| Institute                           | Contact at the institute   | Number<br>of<br>places  | Discipline or<br>subject area   | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD)   |
|-------------------------------------|--|---|---|--|
| IBG-2: Plant Sciences               | Dr. Ladislav<br>Nedbal<br><u>I.nedbal@fz-</u><br>juelich.de<br>Dr. Shizue<br>Matsubara<br><u>s.matsubara@f</u><br><u>z-juelich.de</u><br>+49(0)2461<br>618690  | 1   | Biology,<br>Biophysics<br>Biotechnology   | В, М   |
| Time frame:                         | 3 months during  | May - Dec   | ember 2019  |  |
| Institute's focal research<br>areas | Analyzing forced oscillation of chlorophyll fluorescence for<br>photosynthetic phenotyping<br>Photosynthesis is the biological solar power plant that sustains<br>the life and ecosystems on earth. Since the intensity of light —<br>the power supply for photosynthesis — can change rapidly and<br>dramatically, reactions in photosynthesis are highly regulated to<br>adapt to its fluctuations. A range of mechanisms have evolved to<br>flexibly adjust the balance between energy input (light<br>harvesting) and output (energy conversion and utilization) of the<br>system. |   |   | rescence for<br>nt that sustains<br>ensity of light —<br>ange rapidly and<br>ghly regulated to<br>as have evolved to<br>at (light<br>utilization) of the   |
|                                     | Following light e<br>a small fraction (<br>from Chl in the fo<br>used to drive pho<br>photochemically<br>energy overload,<br>competes with the<br>reactions, one can<br>photochemical a<br>dynamically char<br>Plants exhibit co<br>emission when e<br>Deconvolution o<br>different compo  | nergy abso<br>3-5%) of the<br>orm of fluct<br>otochemic<br>as heat to<br>bese photo<br>an probe the<br>nd non-phenging envire<br>mplex perior<br>exposed to<br>f such perion<br>nents: a st | protion by chlorophy<br>the absorbed light en-<br>prescence while the<br>al reactions or dissip<br>protect the system<br>protect the system<br>of chl fluorescence<br>ochemical and non-p<br>ne operation and reg<br>otochemical reaction<br>otochemical reaction<br>onments. | II (ChI) molecules,<br>ergy is emitted<br>majority is either<br>ated non-<br>against light<br>e emission, which<br>hotochemical<br>julation of<br>ns under<br>fluorescence<br>ated irradiance.<br>s at least three<br>nt. which is |

| modulated with the frequency of light intensity oscillation, and<br>at least two upper harmonic components which show distinct<br>resonant peaks. The latter components are thought to arise from<br>negative feedback regulation of photosynthesis. |
|--|
| Two main goals of this project are:  |
| <ul> <li>to set up Chl fluorescence measurement and data analysis<br/>platforms to study the forced oscillation induced by<br/>harmonic irradiance, and</li> </ul>   |
| <ul> <li>to evaluate the applicability of this approach for<br/>photosynthetic phenotyping to look into the regulatory<br/>properties of negative feedback mechanisms.</li> </ul>  |
|  |

## University of applied sciences Ruhr West (HRW)

Hochschule Ruhr West (HRW) was founded 2009 as a public university of applied sciences in the cities of Mülheim an der Ruhr and Bottrop. These neigbouring cities are part of the metropolitan region called "Ruhr Area" which is located close to Germany's western border to the Netherlands and the city of Düsseldorf. Currently, HRW offers 26 study programmes for ca. 6300 students in the fields of engineering and business administration, leading to accredited Bachelor or Master degrees.

| Contact  | Christian Buhlmann (Incoming Coordinator)          |
|----------|--|
| Contact. | International Office                               |
|          | Duisburger Str. 100, 45479 Mülheim an der Ruhr     |
|          | +49 208 882 54 – 204 (-205),                       |
|          | <u>christian.buhlmann@hs-ruhrwest.de</u>           |
|          | Christiane Hinrichs (Head of International Office) |
|          | Christiane.hinrichs@hs-ruhrwest.de                 |

German as a foreign language for exchange students (Either Beginner <u>or</u> Advanced level, depending on the level of the majority of exchange students). Offered on Mülheim campus only and only if enough students register.

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| Institute                  | Contact at the institute   | Number<br>of places  | Discipline or subject<br>area | Scholars' degree<br>program (M =<br>Master, P = PhD) |  |
|----------------------------|--|--|-------------------------------|--|--|
| Distributed Systems        | Prof. Dr. Marc   | 1  | Computer Science /            |  |  |
| Architecture Lab           | Jansen   |  | Instructional                 | В  |  |
| (Campus Bottrop / Institut |  |  | Designer                      |  |  |
| of Computer Science)       |  |  | German or English             |  |  |
|                            |  |  | minimum B1                    |  |  |
|                            |  |  | required (advanced            |  |  |
|                            |  |  | level)                        |  |  |
| Time frame:                | 16.09.2019 - 30.1  | 1.2019   |                               |  |  |
|                            | The student shou   | ld arrive in   | the week prior to the         | start date. The                                      |  |
|                            | start date (16.09.)  | is fixed.  |                               |  |  |
| Institute's focal research | The successful car   | ndidate will   | be working on a devel         | opment of a  |  |
| areas                      | frontend that allows keep track of intellectual property rights during   |  |                               |  |  |
|                            | the collaborative of   | the collaborative development of learning materials. Therefore, shares |                               |  |  |
|                            | of the intellectual  | property ri  | ghts of the resulting le      | arning objects (LO)                                  |  |
|                            | will be tracked via  | a blockcha   | in based technology. A        | dditionally, the                                     |  |
|                            | determination of the size of the shares for each participating developer |  |                               |  |  |
|                            | can be achieved b  | y flexible vo  | oting mechanisms, e.g.        | , based on liquid                                    |  |
|                            | democracy ideas,   | again facilit  | ated via the same bloc        | ckchain based  |  |
|                            | technology.  |  |                               |  |  |
|                            | Decide the main to   | acks of impl   | amontation this auch          | ngo program will                                     |  |
|                            | beside the main to   | asks of impl   | ementation, this exchange     | tweep the  |  |
|                            | be used in order to  | o strengthe  | an the collaboration be       | ting lab. The goal                                   |  |
|                            | successiul particip  | lich those of  | allaborations further a       | ting lab. The goal                                   |  |
|                            | would be to estab  | iisii tiiose t   |                               | inter the exchange                                   |  |
|                            | piogram.   |  |                               |  |  |

### **University of Aachen (RWTH)**

Building on its interdisciplinary scientific culture, RWTH Aachen University has committed itself to contributing to solving the grand challenges of our time. To this end, RWTH will continue to undertake groundbreaking, responsible research and further enhance the quality and international visibility of its research output. By implementing a wide range of digital teaching and learning concepts, RWTH will open up new dimensions in university teaching and create a new generation of highly qualified graduates.

In addition to research and teaching, RWTH will enforce innovation as a third pillar of its academic mission. The University sets out to develop into an internationally recognized hub for creative, bright minds, promoting young talents in an environment conducive to learning and working. It will provide fair opportunities and career paths in a diverse, globally connected workplace. In all its endeavors, RWTH strives to become – and continue to be – an excellent university with international visibility. With over 260 academic institutes organized in nine faculties, RWTH Aachen University is among the leading European institutions of higher education and scientific research. Currently, more than 45,000 students are registered in at least one of the 175 study programs that the university offers. Among these students more than 10,000 internationals have joined us from 125 different countries.

#### Contact:

Bettina Dinter, Ass.d.L. RWTH Aachen University Turmstr. 46 52062 Aachen Tel: +49 241 80-90812 <u>bettina.dinter@zhv.rwth-aachen.de</u> www.rwth-aachen.de/internationales

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| π | - |

| Institute   | Contact at the institute  | Number<br>of places  | Discipline or subject<br>area  | Scholars' degree<br>program (M =<br>Master, P = PhD)   |
|---|---|--|--|--|
| Central Facility for Electron<br>Microscopy (GFE) | Prof. Dr. Joachim<br>Mayer<br><u>mayer@gfe.rwth</u><br><u>-aachen.de</u><br>+49 241 8024350   | 1  | Materials Science,<br>Physics, Chemistry   | B, M<br>Preference will be<br>given to students<br>from the <b>Technion</b><br><b>at Haifa</b> , in the<br>framework of the<br>existing Umbrella<br>Cooperation. |
| Time frame:                                       | July – December 2   | 019  |  |  |
| Institute's focal research                        | The Central Facility for Electron Microscopy is active in many different  |  |  |  |
| areas   | areas of materials<br>on materials for en<br>areas include mod<br>materials and soft<br>research activities<br>techniques of elect<br>operation of the in | characteriz<br>nergy and f<br>lern lightwe<br>matter. Ca<br>and will ge<br>tron micros | ation and analysis. A s<br>or future information t<br>eight structural materia<br>ndidates will be integr<br>t the possibility to lear<br>scopy including sample<br>and data analysis. | pecial focus exists<br>technology. Other<br>als, functional<br>ated in ongoing<br>on the elementary<br>preparation,  |

### **University of Cologne**

The University of Cologne was founded in 1388 and is one of the oldest and largest universities in Germany. The six faculties offer students a wide range of subjects as well as a great variety in choice and combination of courses and disciplines. The University of Cologne is popular not only due to the diversity of academic opportunities but also to the unique atmosphere of Cologne itself. Also by tradition, the university is internationally oriented and closely cooperates with institutions worldwide. The internationalization of teaching and research can be seen through joint programs with universities and colleges from abroad, double degree programmes, graduate schools, summer schools, short-time programmes, the binding of the (German and international) alumni. An important aspect of the strong international position of our university is the recruitment of qualified international students. Students who expect and fulfil high standards at the university will find best studying conditions here. In 2012, the University of Cologne was distinguished by the German Excellence Initiative, and now belongs to the small group of elite universities in Germany.

The University of Cologne offers German language courses for international students. They are taught by our German as a Foreign Language Department. For the target group of this programme we would recommend the participation in the pre-semester intensive language courses which take place in March respectively September. These courses are offered also for beginners' level, their duration is of 3 to 4 weeks; in case of successful completion participants can obtain credit points.

The registration for the course takes place through the International Office of the University.

#### www.uni-koeln.de

Contact:

Herr Dr. Stefan Bildhauer, Director of International Affairs
Frau Christina Boland, M.A.
Universität zu Köln
Albertus-Magnus-Platz
50923 Köln
Phone: +49 221-470-2382, -1340
<u>s.bildhauer@verw.uni-koeln.de</u>
<u>c.boland@verw.uni-koeln.de</u>

| Institute                           | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area            | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|-------------------------------------|---|------------------------|--|--|
| Historic Institute                  | Prof. Dr. Werner<br>Eck<br>E-Mail:<br><u>Werner.Eck@uni</u><br><u>-koeln.de</u>                   | 1                      | Classic-Ancient<br>History,<br>Epigraphy | B, M   |
| Time frame:                         | May to October 2019   |                        |  |  |
| Institute's focal research<br>areas | The young scholar should participate in our work on the Corpus Inscriptionum Iudaeae/Palaestinae. |                        |  |  |

| Institute   | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area              | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|---|---|------------------------|--|--|
| Department of Criminal<br>Law and Criminal<br>Procedure Law | Prof. Dr. Martin<br>Waßmer<br>Phone: +49 221<br>470 4060<br>E-Mail:<br><u>martin.wassmer</u><br>@uni-koeln.de | 1                      | Criminal Law;<br>Criminal<br>Procedure Law | Μ  |
| Time frame:   | 8 – 12 weeks  |                        |  |  |
| Institute's focal research<br>areas                         | Criminal Law;<br>Criminal Procedur  | e Law                  |  |  |

| Institute                                       | Contact at the institute   | Number<br>of<br>places  | Discipline or<br>subject area  | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD)  |
|---|--|---|--|---|
| Dept. for Media and<br>Technology<br>Management | Prof. Dr. C.<br>Loebbecke,<br>M.B.A.<br><u>claudia.loebbec</u><br><u>ke@uni-</u><br><u>koeln.de</u>  | 1   | Business / Media<br>and Technology<br>Management   | Μ   |
| Time frame:                                     | October – Decen  | nber 2019,  | but also earlier pos   | sible   |
| Institute's focal research<br>areas             | <ul> <li>Business<br/>innovatio<br/>media, te<br/>companie</li> <li>Managen<br/>Software,<br/>magazine</li> <li>Usage of<br/>corporate</li> <li>Managing</li> <li>Candidate</li> </ul> | models, pl<br>n and entr<br>lecommur<br>es<br>nent of dig<br>database<br>es, interact<br>lia objects<br>media anc<br>e context<br>g cybersec<br>es can brir | atform strategies, di<br>repreneurship in the<br>nication and IT produ<br>ital media goods and<br>s, financial informati<br>ive services, informati<br>l technology (IT and<br>urity | gitization and<br>contexts of<br>acts, markets and<br>d services:<br>on, online<br>ition services,<br>telecom) in a |

### **University of Muenster**

The University of Muenster (WWU Münster) has developed a strong research profile in classical and ancient studies, natural sciences, the humanities, medicine, law and business administration. The WWU Münster is one of the biggest universities in Germany and has 15 Departments in 7 Faculties. Founded in 1780, the WWU is also a university with a long tradition in teaching and research. It targets top-level research in high-performance areas for and combines this with promoting first-class young researchers. WWU Münster has strong international activities with over 550 partner institutions around the world, with focus in Asia and Middle East, South America, and Europe. Its Welcome Center offers support for new arriving students and scientists, German language courses are regularly given in the Language Center without supplementary fees.

More information can be found at

http://www.uni-muenster.de/en/

The language center of the University of Münster offers language classes at different dates throughout the whole year. You will find more information on the dates and the requirements here: <u>http://spz.uni-muenster.de/en/daf</u>

Contacts:

Elisabeth Schattke / Dr. Petra Hille International Office Westfaelische Wilhelms-Universitaet Muenster, Schlossplatz 3, 49149 Muenster, Germany

elisabeth.schattke@wwu.de Tel. 0251/ 83- 22459;

petra.hille@wwu.de Tel.: 0251/ 83-22255

| # | 1 |
|---|---|
|   | _ |

| Institute                           | Contact at the institute  | Number<br>of<br>places  | Discipline or<br>subject area  | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD)                          |
|-------------------------------------|---|---|--|---|
| IEB (FB Biologie)                   | Prof. Dr. Gadau<br>Tel: +49(0)251-<br>83-21095<br>gadauj@uni-<br>muenster.de  | 1   | Biology  | B, M  |
| Time frame:                         | May – December  | r 2019  |  |   |
| Institute's focal research<br>areas | Sociobiology and<br>insects (ants and<br>genetic and epig<br>(morphology, life<br>cooperation with<br>already identified<br>students as well. | d Evolution<br>parasitoic<br>enetic arcl<br>history tr<br>the Unive<br>d a potent | hary Genomics in sol<br>d wasps); chemical co<br>hitecture of adaptive<br>raits, behavior) – We<br>ersity of Haifa and ou<br>ial student but we ar | itary and social<br>ommunication,<br>traits<br>have a<br>ir collaborator has<br>re open for other |

| Institute                           | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area  | Scholars' degree<br>program (M =<br>Master, P = PhD) |
|-------------------------------------|--|------------------------|--|--|
| Institutum Judaicum                 | Prof. Dr. Lutz<br>Doering<br><u>lutz.doering@uni</u><br><u>-muenster.de</u><br>+49 251 83-2 25<br>62     | 1                      | Jewish Studies,<br>Jewish History,<br>Talmud, Ancient<br>Jewish<br>Literature,<br>Mediterranean<br>Religions and<br>related subjects | В, М   |
| Time frame:                         | 2 May – 20 December 2019   |                        |  |  |
| Institute's focal research<br>areas | Ancient Judaism and its cultural, political, and religious context<br>(Greece, Rome, early Christianity) |                        |  |  |

| Institute                           | Contact at the institute         | Number<br>of<br>places | Discipline or<br>subject area         | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|-------------------------------------|----------------------------------|------------------------|---------------------------------------|--|
| Department of Physics               | Prof. Dr.<br>Helmut<br>Zacharias | 1                      | Physical<br>chemistry,<br>nanoscience | Μ  |
| Time frame:                         | 2019                             |                        |                                       |  |
| Institute's focal research<br>areas | Self-organizatior                | , function             | al organic films                      |  |

| Institute                             | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area   | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|---------------------------------------|--|------------------------|---|--|
| Institute of New<br>Testament Studies | Prof.es Eve-<br>Marie Becker/<br>Christina<br>Hoegen-Rohls<br>Tel: 49 (0) 251<br>83-22535<br><u>beckerev@uni-</u><br><u>muenster.de</u><br>Tel: +49 (0) 251<br>83-29245<br><u>c.hoegen-</u><br><u>rohls@uni-</u><br><u>muenster.de</u> | 1                      | Bible Studies/<br>Early Christian<br>Studies<br>(Biblical Greek is<br>needed) | M (Biblical Greek<br>skills have to be<br>available)                     |
| Time frame:                           | May – July 2019  |                        | ·   | ·  |

| Institute's focal research | Early Christian studies with a focus on either:                               |
|----------------------------|---|
| areas                      | <ul> <li>Pauline studies and/or studies in ancient epistolograpghy</li> </ul> |
|                            | -Gospel studies (esp. Mark and John) and/or ancient                           |
|                            | historiography  |
|                            | -constructs of time in ancient and Biblical thinking                          |
|                            | -Biblical hermeneutics and reception history                                  |

| Institute                           | Contact at the institute   | Number<br>of<br>places                               | Discipline or<br>subject area  | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|-------------------------------------|--|--|--|--|
| AFO                                 | Dr. Wilhelm<br>Bauhus<br><u>bauhus@uni-</u><br><u>muenster.de</u><br>Tel.: +49 251 83<br>32279 | 1  | Any. As we are a<br>heterogenous<br>team, the interest<br>in research<br>transfer as such<br>should be the<br>focus. | Β, Μ   |
| Time frame:                         | Not between July and August 2019   |  |  |  |
| Institute's focal research<br>areas | Science and Tech<br>for science comm<br>citizen science pu<br>start up business                | nnology Tr<br>nunication<br>rojects, bio<br>support. | ansfer, strategies and<br>and practical implei<br>pinspiration, advice t   | d methodologies<br>mentations,<br>o inventors and                        |
|                                     | At least basic Ge  | rman wou   | ld be asset. Working   | Language: English  |
|                                     | For an overview of the projects please consult our website                                     |  |  | our website  |
|                                     | https://www.uni  | -muenste   | r.de/AFO/en/index.s  | <u>html</u>  |
|                                     | https://www.uni  | -muenste   | r.de/AFO/index.shtm  | <u>11</u>  |

| Institute  | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area       | Scholars' degree<br>program<br>(B = Bachelor; M<br>= Master; P =<br>PhD) |
|--|--|------------------------|-------------------------------------|--|
| Institute of Applied<br>Physics,<br>Nonlinear Photonics<br>group | Prof. Dr.<br>Cornelia Denz,<br>Director<br>denz@uni-<br>muenster.de<br>Tel. +49 251<br>8333518<br>Fax. +49 251<br>8339811<br>http://www.no<br>nlinear-<br>photonics.de | 1                      | Physics; Optics; El.<br>Engineering | B, M   |
| Time frame:  | June – October 2   | 019                    |                                     |  |

| Institute's focal research<br>areas | Photonics – applications of optics in information processing,<br>biology and medicine – has recently achieved a highly developed<br>state that allows to consider the actual century as the "century<br>of the photon" that displaces the last century - the "century of<br>the electron".  |  |  |
|-------------------------------------|---|--|--|
|                                     | Photonics is therefore one of the most promising technologies of<br>the future, and driving motor for many industry applications of<br>optical technologies which are nowadays already used e.g. in<br>optical data storage as for CDs and DVDs, in optical illumination<br>with LEDs or OLEDs, or in optical communication using optical<br>fibers.                                |  |  |
|                                     | Nonlinear optical effects allow to amplify, control, and steer light<br>in order to realize complex information processing tasks. They<br>require the understanding and control of nonlinear effects as<br>well as tailoring light for the purpose of application. Using<br>nonlinear optical processing features, we can use light as the<br>carrier of information of the future. |  |  |
|                                     | Our actual research activities are centered around this vision,<br>based on two major focus lines - nonlinear optical applications in<br>information, biology and medicine, and photonic circuits by light<br>is guiding light.   |  |  |
|                                     | In this field, we are offering places for PhD students or Master students in the following fields:  |  |  |
|                                     | <ul> <li>Investigations of cell elasticity by optical tweezers</li> </ul>   |  |  |
|                                     | <ul> <li>Development of tailored light fields for holographic optical trapping</li> </ul>   |  |  |
|                                     | Optical micro sensors for customized light fields   |  |  |
|                                     | Realization of polymer structures by dielectrophoresis  |  |  |
|                                     | Nonlinear light localization in photonic crystal structures   |  |  |
|                                     | <ul> <li>Nondiffracting and caustic beams as tools for photonic<br/>lattices</li> </ul>   |  |  |
|                                     | <ul> <li>Nonlinear integrated optics by direct femtosecond laser<br/>writing</li> </ul>   |  |  |
|                                     | Nonlinear microscopy  |  |  |

### **Muenster University of Applied Sciences**

The FH Muenster – Muenster University of Applied Sciences was founded in 1971 out of public and private schools and has developed to a modern, achievement-oriented and science-oriented university.

FH Muenster is with around 14,000 students and 12 faculties/central research institutions one of the biggest institutions of its kind in Germany.

The departments and institutions are located at different places in Muenster and Steinfurt.

A special service for foreign students is offered to make students' life easier and to integrate them successfully into everyday life at the university (FHiRST – FH international Reception Service Team).

Internet: <u>www.fh-muenster.de</u>

Language Courses from A2 - B2.

In cooperation with local language schools, flexible dates according to student's availability.

Contact: International Office Nadine Pantel Johann-Krane-Weg 25 48149 Münster Phone +49 251 83 64119 Email: <u>Nadine.pantel@fh-muenster.de</u>

| Institute  | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area                                    | Scholars' degree<br>program (M =<br>Master, P = PhD) |  |
|--|--|------------------------|--|--|--|
| Department of<br>Mechanical Engineering<br>Laboratory for Thermal<br>and Power Engineering | Prof. DrIng.<br>habil. Stefan<br>aus der<br>Wiesche<br>Stegerwaldstr.<br>39  | 1                      | Mechanical<br>Engineering<br>Good English skills<br>are required | B,M  |  |
|  | 48565 Steinfurt<br>Raum: N 130<br>Tel: 02551   |                        | are required.  |  |  |
|  | 9 62272<br><u>wiesche@fh-</u><br><u>muenster.de</u>  |                        |  |  |  |
| Time frame:  | May – December 2019  |                        |  |  |  |
| Institute's focal research<br>areas  | All research projects are dealing with fluid mechanics and heat transfer (both experimental and theoretical research).   |                        |  | hanics and heat<br>earch).                           |  |
|  | Every project is linked to a larger research project coordinated by<br>PhD students and research assistants in the lab. The supervision<br>and support of the students is fully ensured. |                        |  |  |  |
|  | The following projects are currently open for the present initiative:  |                        |  |  |  |
|  | - Boiling heat transfer and investigation of microscale flow phenomena   |                        |  |  |  |
|  | - Convective heat transfer from rotating disks   |                        |  |  |  |
|  | - Flow separation and reattachment of a turbulent boundary layer   |                        |  |  |  |
|  | Further information is available (see corresponding internet page of the lab:  |                        |  |  |  |
|  | ( <u>https://en.fh-</u><br><u>muenster.de/maschinenbau/labore/waermetechnik/waermetec</u><br><u>hnik.php</u> )   |                        |  |  |  |

### University of Paderborn

University of Paderborn is a fully accredited state university offering all types of academic degrees including PhD and postdoctoral lecture qualification.

The university has an academic staff of about 1.360 and offers a wide range of subjects in five faculties: Faculty of Arts and Humanities, Faculty of Business Administration and Economics, Faculty of Science, Faculty of Mechanical Engineering, Faculty of Computer Science, Electrical Engineering and Mathematics.

There are about 20.200 students currently studying at the University, among them about 2.170 international students.

#### www.uni-paderborn.de

Language courses: 4 weeks crash course of 20 hours per week; begins before the official start of the semester in March and in September. Another course of 10 hours per week runs during the semester. These offers are subject to change due to a currently ongoing restructuring of our German courses.

Please contact International Office, Paderborn

Web: <a href="http://www.upb.de/studium/international-office/deutschkurse/">www.upb.de/studium/international-office/deutschkurse/</a>

Contact:

Kerstin Ollech International Office, Paderborn University, Warburger Straße 100, D-33098 Paderborn phone: +49 (0) 5251 60 36 38 e-mail: <u>ollech@zv.upb.de</u>

| Institute   | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area                                      | Scholars' degree<br>program<br>(B= Bachelor; M=<br>Master; P= PhD) |  |
|---|---|------------------------|--|--|--|
| Department of<br>Philosophy, Center for<br>the "History of Women<br>Philosophers and<br>Scientists" | Prof. Dr. Ruth<br>Hagengruber<br>phone: +49 (0)<br>5251 60 23 08<br>e-mail:<br><u>ruth.hagengruber</u><br>@upb.de   | 1                      | History of<br>Women<br>Philosophers,<br>Philosophy of<br>Economics | Μ  |  |
| Time frame:   | Sept. – Nov. 2019 (12 weeks)  |                        |  |  |  |
| Institute's focal research<br>areas   | (1) The Teaching and Research Area "History of Women<br>Philosophers" has existed at Paderborn University since 2005<br>under the heading by Prof. Dr. Hagengruber. Its aim is to renew<br>the long-lasting tradition of women philosophers. The Paderborn<br>University offers unique opportunities to gain insight into the<br>contributions of Woman Philosophers to the history of ideas. |                        |  |  |  |
|   | Info: <a href="http://historyofwomenphilosophers.org/">http://historyofwomenphilosophers.org/</a>   |                        |  |  |  |
|   | <ul> <li>(2) The Teaching and Research Area "EcoTechGender" focuses on<br/>the interrelations between Economics, Technology, and Gender<br/>– the challenging and decisive factors of the future.</li> </ul>  |                        |  |  |  |
|   | Info: <u>http://kw.uni-paderborn.de/fach-</u><br>philosophie/forschung/ecotechgender/   |                        |  |  |  |

| Institute                                    | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area                     | Scholars' degree<br>program<br>(B= Bachelor; M=<br>Master; P= PhD) |
|--|--|------------------------|---|--|
| Department of Physics,<br>Faculty of Science | Prof. Dr. Arno<br>Schindlmayr<br>E-Mail:<br><u>arno.schindlmayr</u><br><u>@uni-</u><br><u>paderborn.de</u><br>Tel.: +49 (0)-5251-<br>60-2338   | 1                      | Theoretical<br>Physics,<br>Applied<br>Mathematics | Μ  |
| Time frame:                                  | 12 Weeks from 1 O  | ctober unt             | il 20 December 20                                 | )19  |
| Institute's focal research<br>areas          | Within the field of theoretical solid-state physics, the focus of<br>our research is the development and application of ab initio<br>methods to investigate the electronic structure and excitation<br>spectra of solids without adjustable parameters. Our principal<br>techniques are density-functional theory and many-body<br>perturbation theory, which is based on Green functions. With<br>these methods, the electronic, optical and magnetic properties<br>of a material can be predicted using only fundamental quantum<br>mechanics and the chemical composition of the material in<br>question. We are particularly interested in the effects of<br>correlation on the electronic band structure and in the accurate<br>description of collective excitations, such as plasmons, excitons<br>and magnons. Within a research project, candidates could make<br>use of these techniques and the available computer codes for<br>quantitative simulations of technologically interesting materials.<br>Another important activity is the formal theory development<br>with the aims of analysing the performance of common<br>approximations and of improving the internal consistency of<br>practical implementations. For this purpose, the methods are applied<br>to test systems that have either analytic or numerically exact<br>solutions for comparison. This offers a variety of possible short-<br>term projects for candidates with a background of theoretical<br>solid-state or molecular physics, many-body quantum mechanics<br>or applied mathematics. |                        |   |  |

### **University of Wuppertal**

Bergische Universität Wuppertal, founded in 1972, is one of the state universities in North Rhine-Westphalia (NRW), which is economically the most significant German state with an outstanding educational and cultural landscape. The city of Wuppertal, situated close to Düsseldorf and Cologne in a particularly delightful region with wooded hills, meadows, orchards and fields, called the "Bergisches Land", is an interesting mixture of outgoing metropolis and cosy village with a lot of leisure facilities. From any part of the city it is only a 10 minute walk to the nearest park or shady woodland path.

#### https://www.wuppertal.de/microsite/en/index.php

The University of Wuppertal towers over the city. The main campus enjoys a panoramic view across the town – a perfect environment for developing inspiring ideas and academic projects that will shape the future. Some 20.000 students from more than 100 countries benefit from our high-level academic approaches in teaching, and the university's commitment to research and international collaboration. Wuppertal University offers a diverse range of programs in science, engineering economics and the humanities, as well as educational science, design and architecture. Our academic culture is marked by diversity, experience and innovation.

#### Study in Germany – Join us in Wuppertal!



http://www.internationales.uni-wuppertal.de/en/incoming/international-students.html

Our Language Center "Sprachlehrinstitut –SLI" <u>http://www.sli.uni-wuppertal.de/en/germanasforeignlang.html</u>offers the following courses of German as a foreign language:

- Intensive German Courses for perspective students Levels: A1 (beginners) to C1 (advanced).Weekdays daily beginning in April and October each year with 30 hours per week.
- German Courses in the evening for international guests beginning in October. Levels: A1, A2, B1. Sessions of three hours each will be held twice a week
- Lecture course "German Grammar" (Level: B2 upward), 2 hours per week
- German for Business and Economics (Level: advanced), 2 hours per week
- •German for Humanities and Social Sciences

(Level: advanced), 2 hours per week

• German for Science and Technology (Level: advanced), 2 hours per week

Contact: Andrea Bieck Head of International Office Bergische Universität Wuppertal Gauss-Str. 20, 42119 Wuppertal, Germany

> Phone: +49 (0) 202 439 2181 / Fax: +49 (0)202 439 3856 Email: <u>bieck@uni-wuppertal.de</u>

| Institute   | Contact at the institute   | Numb<br>er of<br>places | Discipline or<br>subject area   | Scholars' degree<br>program<br>(B= Bachelor; M=<br>Master; P= PhD) |
|---|--|-------------------------|---|--|
| Center for international<br>studies in social policy and<br>social services<br><u>http://www.sozpaed.uni-</u><br><u>wuppertal.de/sozialpolitik/</u> | Prof. Dr. Heinz<br>SÜNKER<br>Email:<br><u>suenker@uni-</u><br>wuppertal.de<br>Phone:<br>+49 (0)202<br>439-2295   | 1                       | Social Sciences;<br>Education; Social<br>Policy; Social<br>Work; Migration;<br>Gender; Social<br>Sciences and Law | Μ  |
| Time frame:   | May to July or October to December 2019  |                         |   |  |
| Institute's focal research<br>areas   | The center deals with theory, politics and practices in political<br>and welfare institutions, in education and social services. We<br>offer a broad range of topics with respect to comparative<br>questions. |                         |   |  |

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| Institute                                      | Contact at the institute   | Number<br>of<br>places | Discipline or<br>subject area | Scholars' degree<br>program<br>(B= Bachelor; M=<br>Master; P= PhD) |
|--|--|------------------------|-------------------------------|--|
| Mechanical Engineering<br>– Engineering Design | Prof. Dr. Peter<br>GUST<br>Email:<br><u>peter.gust@uni</u><br>-wuppertal.de<br>Phone:<br>+49 (0)202 439-<br>2046   | 1                      | Mechanical<br>Engineering     | Μ  |
| Time frame:                                    | May – mid July 2019  |                        |                               |  |
| Institute's focal research<br>areas            | <ul> <li>Robust design of mechatronic products</li> <li>Product Development: Methods and tools</li> <li>Quality management in development</li> <li>Knowledge management with Wiki systems,</li> <li>Development of multi-articular systems</li> <li>Tolerance analyses and tolerance management</li> </ul> |                        |                               |  |

| Institute  | Contact at the institute  | Number<br>of<br>places | Discipline or<br>subject area | Scholars' degree<br>program<br>(B= Bachelor; M=<br>Master; P= PhD) |
|--|---|------------------------|-------------------------------|--|
| Research group<br>Experimental Particle<br>Physics | Prof. Dr.<br>Wolfgang<br>WAGNER<br>Email:<br><u>wagner@uni-</u><br><u>wuppertal.de</u><br>Phone:<br>+49 (0)202 439-<br>2861 | 1                      | Physics                       | В, М   |
| Time frame:  | May 1 <sup>st</sup> – Nover   | ber 30 <sup>th</sup> , | 2019                          | •  |

| Institute's focal research | Our group does research in the field of elementary particle        |  |  |  |
|----------------------------|--|--|--|--|
| areas                      | physics with the ATLAS detector at the Large Hadron Collider       |  |  |  |
|                            | (LHC) at the European Centre for Nuclear Research (CERN).          |  |  |  |
|                            | The students can choose from two projects:                         |  |  |  |
|                            | a) data analysis in top quark physics, or                          |  |  |  |
|                            | b) digital electronics for detector readout.                       |  |  |  |
|                            | In the analysis project, the student will work on studies based on |  |  |  |
|                            | simulated events, preparing analyses to search for additional      |  |  |  |
|                            | (new) heavy particles which decay to top quarks. The aim is to     |  |  |  |
|                            | obtain a basic understanding of the event kinematics depending     |  |  |  |
|                            | on the mass of the new particle. Alternatively, the student can    |  |  |  |
|                            | also choose to work on studies supporting a high precision         |  |  |  |
|                            | measurement of the top-quark mass in single top-quark events       |  |  |  |
|                            | observed with the ATLAS detector.                                  |  |  |  |
|                            | In the hardware project, the student will work together with       |  |  |  |
|                            | researchers preparing a future upgrade of the ATLAS pixel          |  |  |  |
|                            | detector to cope with higher readout bandwidth. The student        |  |  |  |
|                            | will learn how to layout a small printed circuit board used at a   |  |  |  |
|                            | test stand we operate here in Wuppertal. The test setup mimics     |  |  |  |
|                            | conditions expected at the high luminosity LHC regarding the       |  |  |  |
|                            | data rates and is based on hardware built for a recent upgrade of  |  |  |  |
|                            | the ATLAS pixel detector.  |  |  |  |