Institute for Advanced Study
Technical University of Munich

Workshop für Forscher-Alumni-Beauftragte

Ernst Rank
Direktor TUM-IAS

19.4.2018
TUM Institute for Advanced Study
....at the center of TUM
Main Goals

Flagship for top-level international research ("risking creativity")
- Create fields of excellence in "Science and Technology"
- Establish internal, local and international collaborations
- Bring forth a pool of highly competitive, aspiring early-career researchers
- Become an intellectual center for multidisciplinary scientific dialogue
## Fellowship Program

<table>
<thead>
<tr>
<th>Fellowship Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carl von Linde Senior Fellowship</strong></td>
<td>for excellent TUM faculty members</td>
</tr>
<tr>
<td><strong>Rudolf Mößbauer Tenure Track Fellowship</strong></td>
<td>for outstanding, high-potential early-career scientists</td>
</tr>
<tr>
<td><strong>Hans Fischer Senior Fellowship</strong></td>
<td>for renowned international scientists from outside TUM</td>
</tr>
<tr>
<td><strong>Rudolf Diesel Industry Fellowship</strong></td>
<td>for highly qualified researchers from industry</td>
</tr>
<tr>
<td><strong>Hans Fischer Fellowship</strong></td>
<td>for outstanding early-career scientists from outside TUM</td>
</tr>
<tr>
<td><strong>Anna Boyksen Fellowship</strong></td>
<td>for outstanding scientists who intend to explore gender- and diversity-relevant themes in the context of the TUM subject portfolio</td>
</tr>
<tr>
<td><strong>Visiting Fellowship</strong></td>
<td></td>
</tr>
</tbody>
</table>
Hans Fischer (Senior) Fellowships

- Outstanding international scientists
- Development of innovative, high-risk topics together with a TUM Research Group
- Fellowships lasting 3 years
- Commitment: various stays at TUM with a total of at least 9 months
- Fulfillment of the Marie Curie COFUND mobility requirements

Hans Fischer Fellowships

- Award of € 30,000 plus € 50,000 research fund
- Support for one doctoral candidate at TUM for 3 years

Hans Fischer Senior Fellowships

- Award of € 60,000 plus € 50,000 research fund
- Support for one doctoral candidate at TUM for 3 years
Facts and Figures

- More than 153 Fellows (about 55 active Fellows) from 17 countries


- Industry collaborations: Airbus Defense and Space, Alstom Power AG, Bell Labs - Alcatel-Lucent, BMW Group, IBM, Philips, Siemens, …
Current Research Areas

- Advanced Computation and Modeling
- Bio-Engineering & Imaging
- Communication and Information
- Control Theory, Systems Engineering and Robotics
- Environmental and Earth Sciences, Building Technology
- Fundamental Natural and Life Sciences
- Gender and Diversity in Science and Engineering
- Medical Natural Sciences
- Surface, Interface, Nano- and Quantum Science
An Intellectual Center At The Heart of TUM

- Organization and venue of scientific events
- Organization of scientific networking events for community and TUM members on a yearly, monthly and weekly basis
Visiting Fellowships in the post-tenure period: Funds for travel to TUM and support for housing

Focal Periods: Collaboration projects of active Fellows and Alumni Fellows

2016 Clinical Cell and Tissue Engineering
2017 PROMISe - PRedicting macroscopic behavior from MIcroscopic Simulators
2018 Advanced Computational Modeling for Tumor Growth Prediction

TUM Ambassadors

Most of the TUM-IAS Alumni Fellows continue and expand their outstandingly successful and stimulating collaborations with TUM (with funding by EU, DFG, …)
Thank you for your attention