

German Russian Institute of Advanced Technology (GRIAT)



Milestones of GRIAT

- 2011: Idea of a German Russian University - Prof. Gilmutdinov (KNRTU) und Dr. Berghorn (DAAD Moscow Branch Office)
- 2012: Prof. Augsburg visits Kazan with a delegation of Thuringian Minister President Lieberknecht
- 4/2013: Memorandum of Understanding between DAAD - Secretary General Dr. Rüländ and Rector Prof. Gilmutdinov
- 4/ 2013: Application for funding within the DAAD-programme *Transnational Education*
- Development of a strategy for a German consortium (TU Chemnitz, BTU Cottbus, OVGU Magdeburg) by Dr. March and TUIIS



Milestones of GRIAT

- 5/2013: Constituent meeting of the consortium
- 5/2013: Submission of the **expression of interest** at DAAD
- 10/2013: Submission of the **full proposal**
- 11/2013: Fact Finding Mission to Kazan (TUIL, OvGU, BTU)
- 12/2013: Provisional confirmation by the DAAD-commission
- 02/2014: Workshops in Magdeburg and Ilmenau
- 06/2014: Green light by DAAD: Funding agreement
- 02.09.2014 Ceremonial opening of GRIAT / Start of the study process
- 02/ 2015: Meeting of the Board of Trustees in Kazan

Milestones of GRIAT



Appreciation and political support for GRIAT:

- President of Tatarstan
Minnichanow
- Thuringian Minister
for economics affairs
Machnik
- Rectors
Gilmutdinov (1.v.l.),
Scharff

Milestones of GRIAT



DAAD-Conference
Transnational Education
in Berlin, 1 June 2014

On stage: Rector Scharff
and Rector Gilmudtinov
inviting the audience to
today's conference in Kazan

DAAD – Financial Support

- **530.724 €** 4/2014 -12/2017
- Degressive funding (evidence of sustainability)
- Tuition fees from 09/2016 onwards
- Possible extension of the program until 2021
- Evaluating of the program 2016 and 2017
- 3 new jobs in Germany:
 - 1 administrative coordinator 100% Ilmenau
 - 2 subject coordinators 50% Ilmenau & Magdeburg
 - tutors for the social and academic support of the students

Financial engagement of the Republic of Tatarstan

- Infrastructure (buildings and laboratories in Kazan)
- Grants for the semester in Germany (Programm Algarysh)
- Grants for reserarcher groups from Kazan and for teaching staff
- Tuition fees starting in 2016/17

Academic concept of GRIAT

- Export of MA – engineering programs (4 semesters) in English
- Flying faculty: one blockseminar per semester in each program
- DAAD longterm engineering lecturer at GRIAT in Kasan
- DAAD language lecturer at GRIAT in Kazan
- 3rd semester obligatory in Germany
- German language courses in Kasan and in Germany
- Close cooperation with German companies in Russia
- Integration of further partner universities in Germany

The GRIAT- programmes (Master of Science)

TU Ilmenau

- **Research in Computer and Systems Engineering** (Prof. K.-U. Sattler)
- **Communications and Signal Processing** (Prof. M. Haardt)
- **Automotive Engineering** (Prof. K. Augsburg)

Otto-von-Guericke-Universität Magdeburg

- **Electrical Engineering and Information Technology** (Prof. A. Lindemann)
- **Chemical and Energy Engineering** (Prof. H. Weiß)
- **Systems Engineering and Engineering Cybernetics** (Prof. R. Findeisen)

Kazan National Research Technical University



Kazan National Research Technical University KNRTU-KAI

Areas of Research:

- Aviation Technology
- Material Engineering
- Energy Technology
- Optoelectronics
- Nano Technology
- Applied computer science / Software Engineering



GRIAT opening ceremony 2/9/14



GRIAT opening ceremony 2/9/14



GRIAT opening ceremony 2/9/14

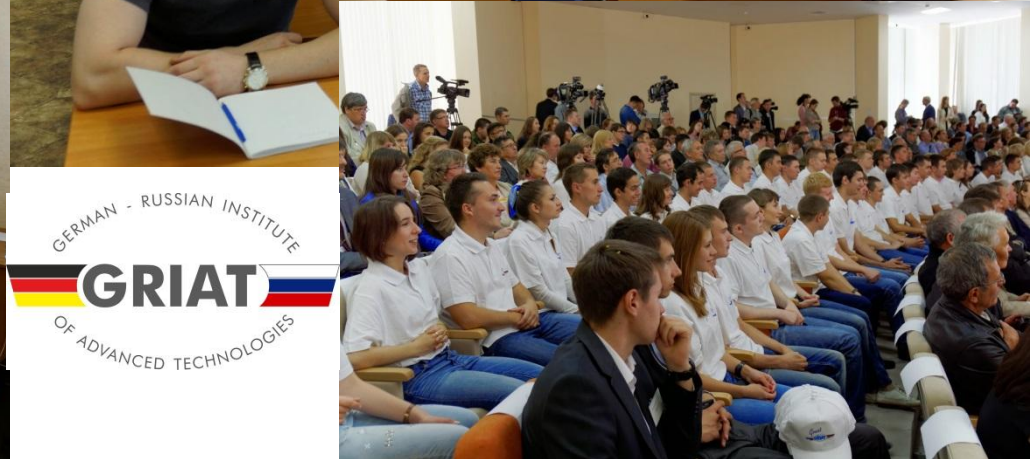
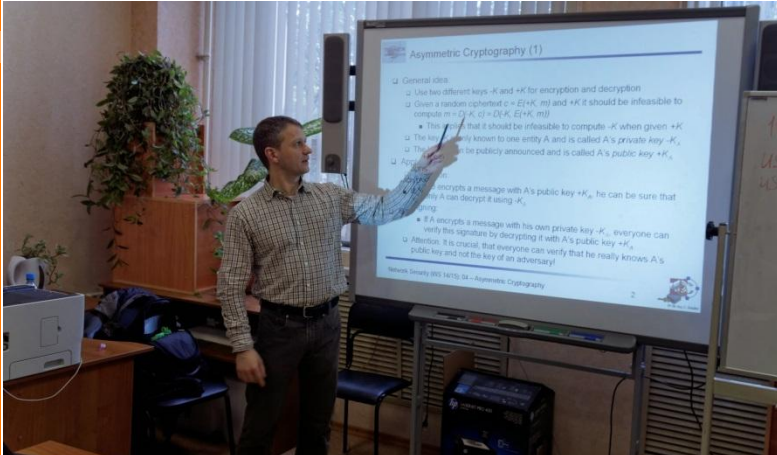


Our first students

GRIAT opening ceremony 2/9/14



Start of the semester 3/9/14



Perspectives of GRIAT

- Integration of further partner universities in Germany
- Introduction of new MA-programs
- Cooperation with universities in Central Asia
- Research collaborations
- Joint PhD programs



Technische Universität Ilmenau

WELCOME



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Newtonbau (Building for Department of Mechanical Engineering)

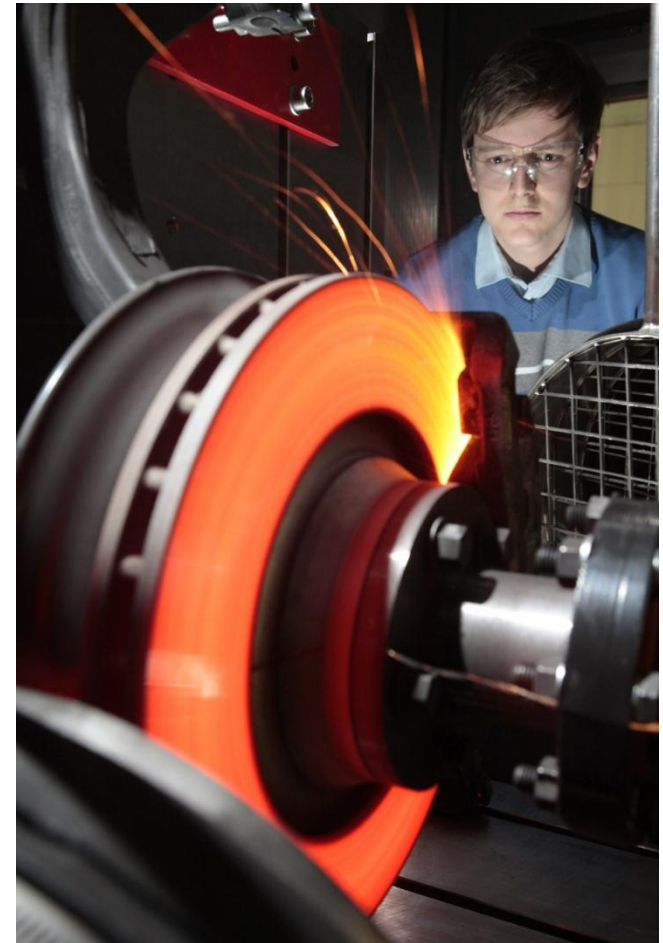


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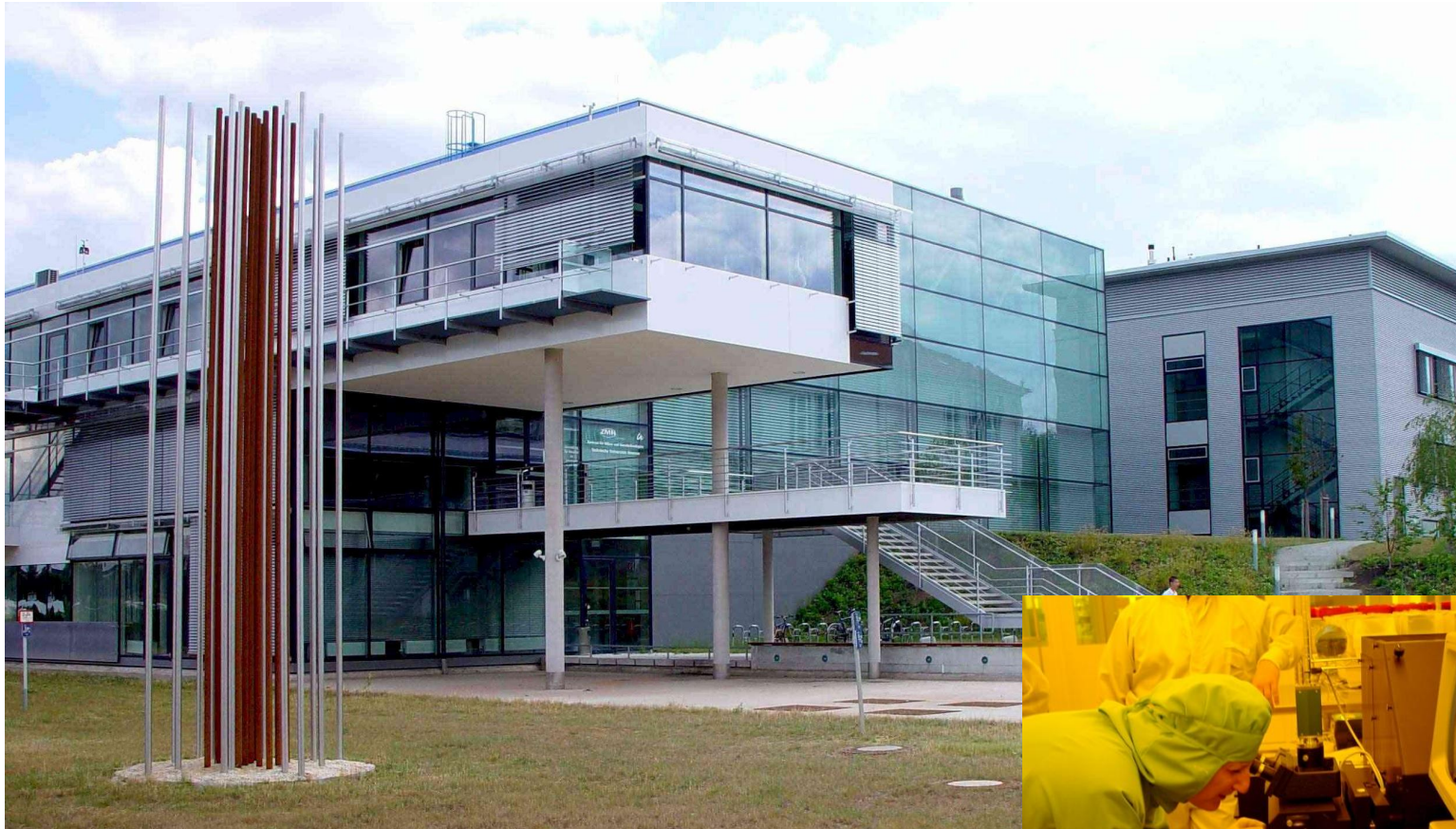
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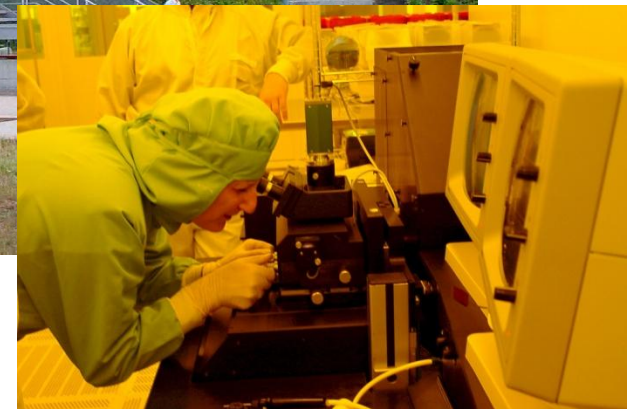
Ernst-Abbe-Zentrum for research and transfer

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Inter-departmental Center of Micro- and Nanotechnologies

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Leibnizbau with
Thuringia's Patents Center (PATON)
and University Library



Photo: © TU Ilmenau/Sebastian Trepesch / Michael Reichel

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Students' cafeteria and dormitory

Photo: © TU Ilmenau

Staff and students

- (University) **Professors: 104**
 - (endowed) **Professors: 8**
 - junior professorship: **6**
- **academic staff: 500**
- **Staff funded from outside sources: 300**
- **Students in**
 - **WS 2010/11 6.439**
 - **WS 2011/12 6.949**
 - **WS 2012/13 7.037**
 - **WS 2013/14 6.818**
 - **WS 2014/15 6.639**
 - **Freshman 1.354**
- **proportional international students ca. 15,5 %**

Data as at: 11/2014

Research Alliance

- **Nanoengineering**
- **Precision Engineering and Precision Measurement Technology**
- **Technical and biomedical assistance systems**
- **Drive, Energy and Environmental Systems Technology**
- **Digital Media Technology**
- **Mobile Communications**

Research Activities

1. **Competence Center**
 - „Nanopositioning and Nanomeasuring Machines“
2. **DFG-Research-Group**
 - „Magneto-Fluid-Dynamics“
3. **„Thüringer Innovationszentrum Mobilität“ (ThIMo)**
4. **Thuringian Center for Mechanical Engineering (ThZM)**
5. **Centre for Innovation Competence (ZIK)**
 - 3-D-Nanostructuring

Research Activities

5. Research Training Group

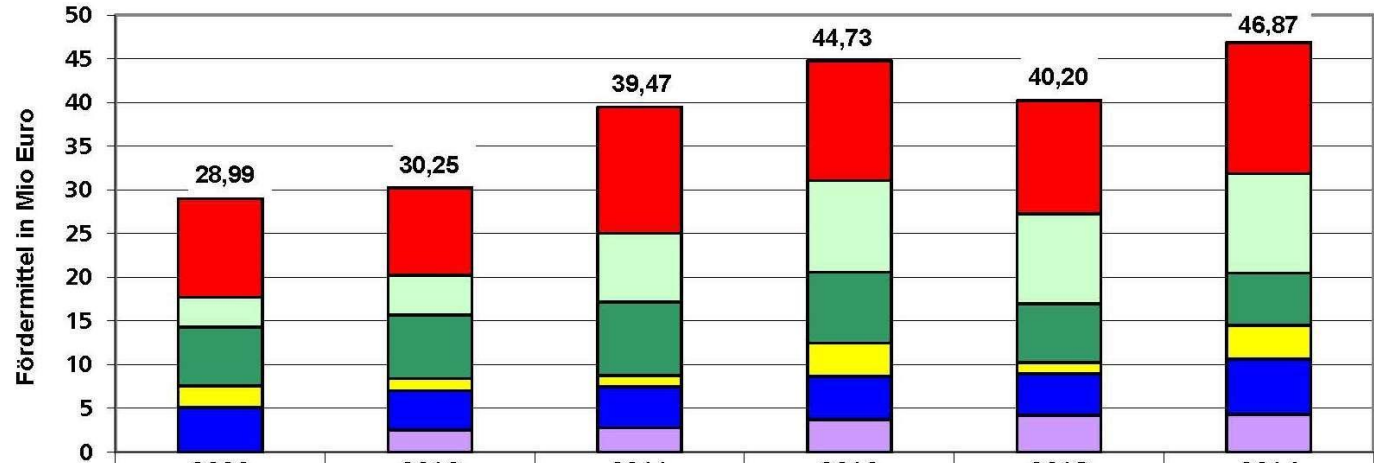
- (Federally funded) for Lorentz Force Velocimetry and Lorentz Force Eddy Current Testing

6. Graduate Research School

- (Thuringian) Graduate Research School for Photovoltaics – Photograd
- International Graduate on Mobile Communications – MOBICOM
- Lorentz Force Velocimetry and Lorentz Force Eddy Current Testing

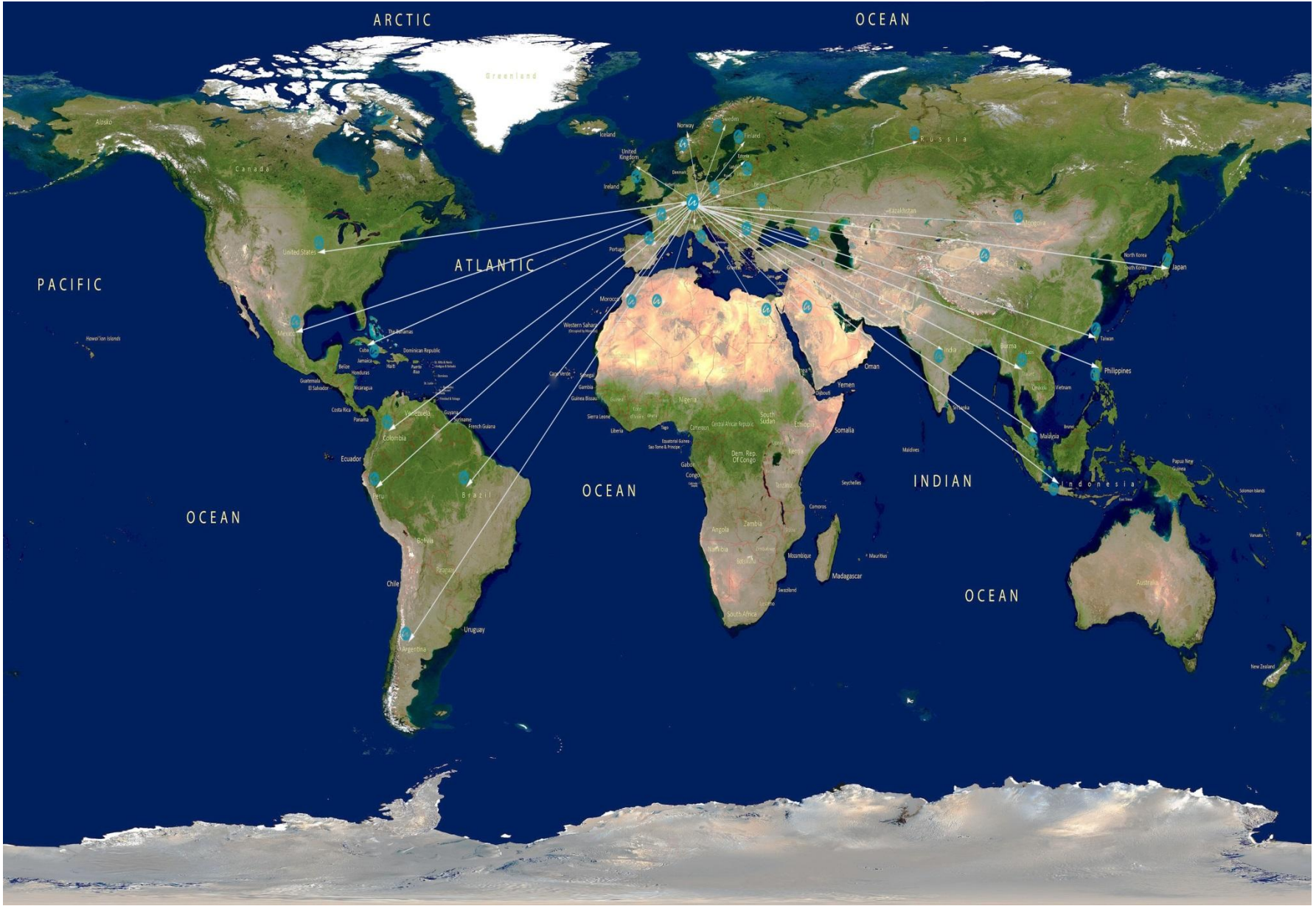
Third-party Funds

Third-party funding efficiency per professor in 2014: approx. € 460,000 p.a.
clearly no. 1 in Thuringia; remarkable in countrywide comparison



	2009	2010	2011	2012	2013	2014
■ Bundesfördermittel	11,29	10,01	14,43	13,68	12,95	15,01
□ Landesfördermittel	3,44	4,59	7,89	10,48	10,30	11,38
■ DFG	6,71	7,25	8,39	8,09	6,71	5,99
■ EU (ab 2006 ohne Leonardo)	2,45	1,38	1,30	3,82	1,28	3,87
■ freie Drittmittel (Industrie)	5,11	4,51	4,68	4,96	4,73	6,34
■ Sonstige *)	0,00	2,51	2,78	3,70	4,23	4,28

*) z.B. Spenden, bis 2009 in freien Drittmitteln



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Double Degree Programms

- **Russia: Moscow Power Engineering Institute & Elektrotechnical State University St. Petersburg:**
Computer Science / Computer Engineering / Electrical Engineering and Information Technology / Mechatronics / Mechanical Engineering / Technical Physics (Master program)
- **France: École Nationale Supérieure de Mécanique et des Microtechniques de Besançon (ENSMM):**
Micro-Mechatronics (Master program)
- **Malaysia: University Teknologi Malaysia (UTM)**
Biomedical Engineering (Master program)
- **Peru: Pontificia Universidad Católica del Perú (PUCP)**
Material Sciences / Mechatronics / Mechanical Engineering / Technical Kybernetics (Master program)
- **China: Tongji University, Shanghai / Tongji Zhejiang College**
Biomedical Engineering / Industrial Engineering (Bachelor program)
- **Romania: Universitatea Transilvania din Braşov**
Computer Science (Master program in German)

International large scale projects

German-Russian Institute of Advanced Technologies
GRIAT – Kazan / Russian Federation

International University Liaison Indonesia – IULI
Jakarta / Indonesia

Strategic Partnership of engineering faculties of TU
Ilmenau, State University St. Petersburg ETU and
National Research University Moscow MEI SPITSE



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The Spirit of Science

The Spirit of Science



Cultural activities at the campus

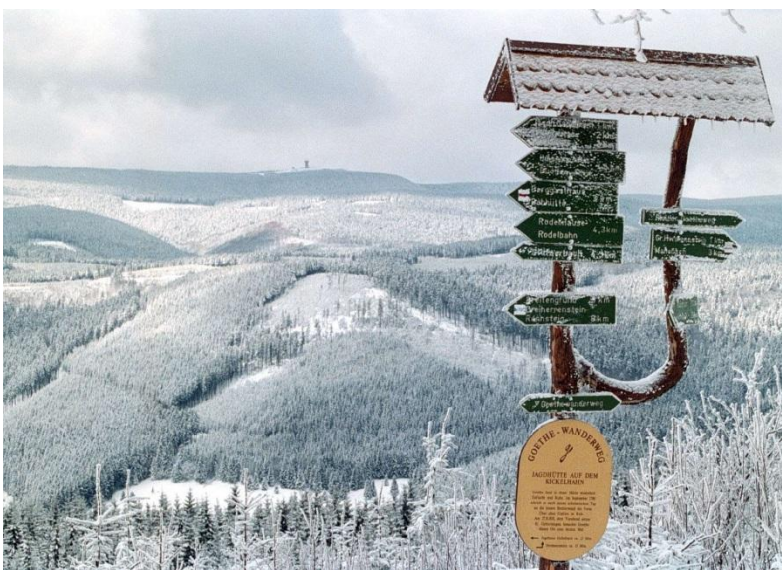
- student clubs
- chamber orchestra e. V.
- chamber choir e.V.
- Ilmenau student broadcast (ISTUFF)
- hsf-student radio
- university film club
- Jazzclub Ilmenau e. V.
- more than 20 sport clubs
- religious student networks



Student's life



Sparetime in Thuringian Forest



Technische Universität Ilmenau



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Photo: Nürnberg Luftbild, Hajo Dietz