

QUALI-Start-Up Science Lectures

An outline

June 2017 | Sabine Dues, Consultant International Relations (Strategic Partnerships)

QUALI-Start-Up Science Lectures

A joint project within the GGSB framework of

Ministry of Education and Science of Georgia,

Shota Rustaveli National Science Foundation,

4 Georgian Universities (TSU, GTU, ISU, AUG) and

Forschungszentrum Jülich

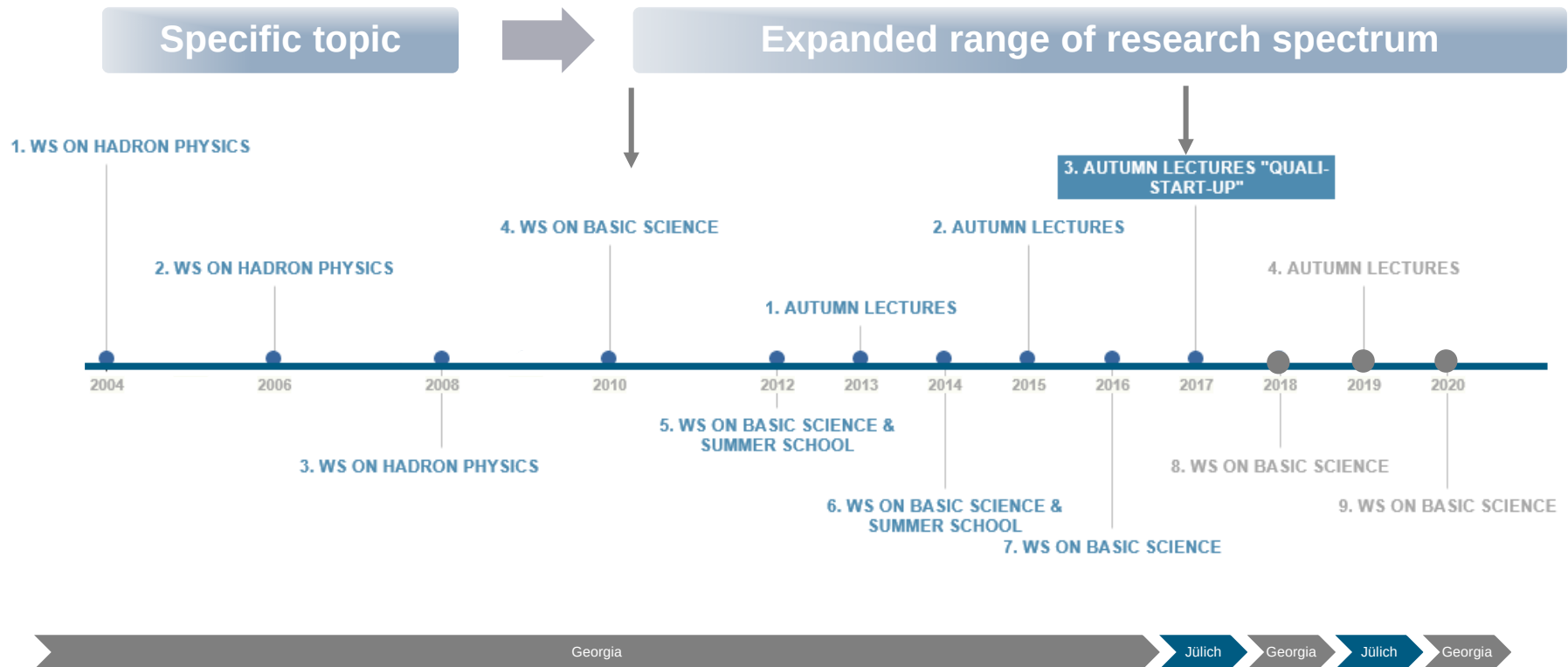


QUALI-Start-Up Science Lectures

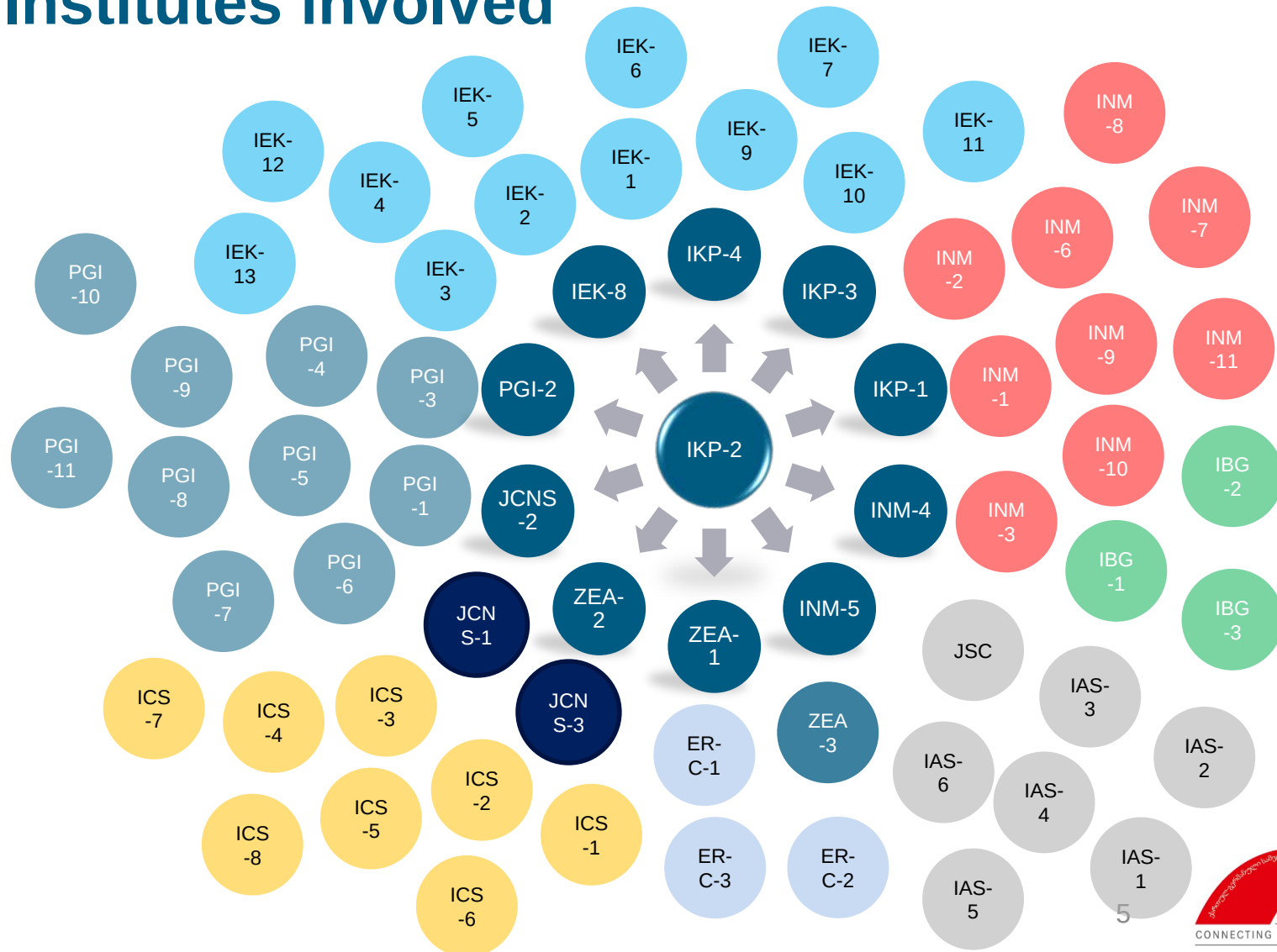
A training course

- for qualified students
- to obtain further qualification in basic science
- to see an interdisciplinary research approach at work
- to be inspired by one of Europe's largest research facilities
- take home ideas for your own career development

Joint Educational Program (GGSB framework)



Institutes involved



Program Overview

September 2017

9 SA	10 SU	11 MO	12 TUE	13 WED	14 THU	15 FR	16 SA	17 SU	
Arrival	Welcome	Lectures at IKP	Lectures at INM	Lectures at JCNS	Lectures at IEK	Lectures at ZEA	Visit Cologne	Departure	MORNING AFTERNOON
		Lab training on subject chosen	Lab training on subject chosen	Visit at RWTH Aachen	Lab training on subject chosen	Lab training on subject chosen			

Program Overview

Lectures in Fundamental Research Applications in the Field Particle and Nuclear Phys

Nuclear Physics Institute

- General introduction
- Precision physics at COSY (Cooler Synchrotron)
- Accelerator basics
- Detector basics
- Data taking techniques
- Analysis and simulation tools

Lectures in Medical Imaging Physics and short-lived Radionuclides for Life Sciences

Institute of Neuroscience and Medicine

- General introduction
- Basics in nuclear medicine
- Medical imaging physics
- Information about MRI and PET
- Basics in radionuclide production
- Applications (e. g. oncology, neurodegenerative diseases)

Lectures in Condensed Matter Physics and Scattering Methods

Jülich Centre for Neutron Science,
Peter-Grünberg-Institute

- General introduction to Jülich Centre for Neutron Science
- Investigation of structure and dynamics of soft matter
- Neutron scattering instruments
- The high brilliance accelerator-based neutron source
- Basic and application-oriented research

Lectures in Atmospheric Science and Environment

Institute of Energy and Climate Research

- General introduction
- Chemical aspects of environmental (atmosphere) monitoring
- Atmospheric chemistry from gas phase to aerosol
- Mathematical methods of modeling of atmosphere
- Regional atmospheric forecast model development

Lectures in Engineering, Electronics and Analytics

Central Institute of Engineering,
Electronics and Analytics

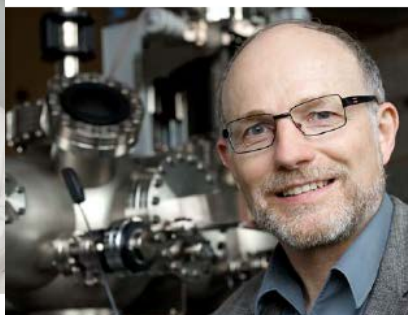
- General introduction
- Vacuum technologies
- Mechanical design & layout
- Simulations, calculations
- Electronic systems
- Solutions in the field of electronics and information technologies



Prof. Mei Bai (IKP-4) and Prof. Dr. Hans Ströher in the hall of COSY – Cooler Synchrotron.



Prof. Dr. N. J. Shah (INM-4) in front of 9.4-tesla magnetic resonance tomograph (MRT) combined with a positron emission tomograph (PET).



Prof. Dr. Thomas Brückel (JCS-2) in front of a Molecular Beam Epitaxy (MBE) system used for preparation of magnetic thin films.

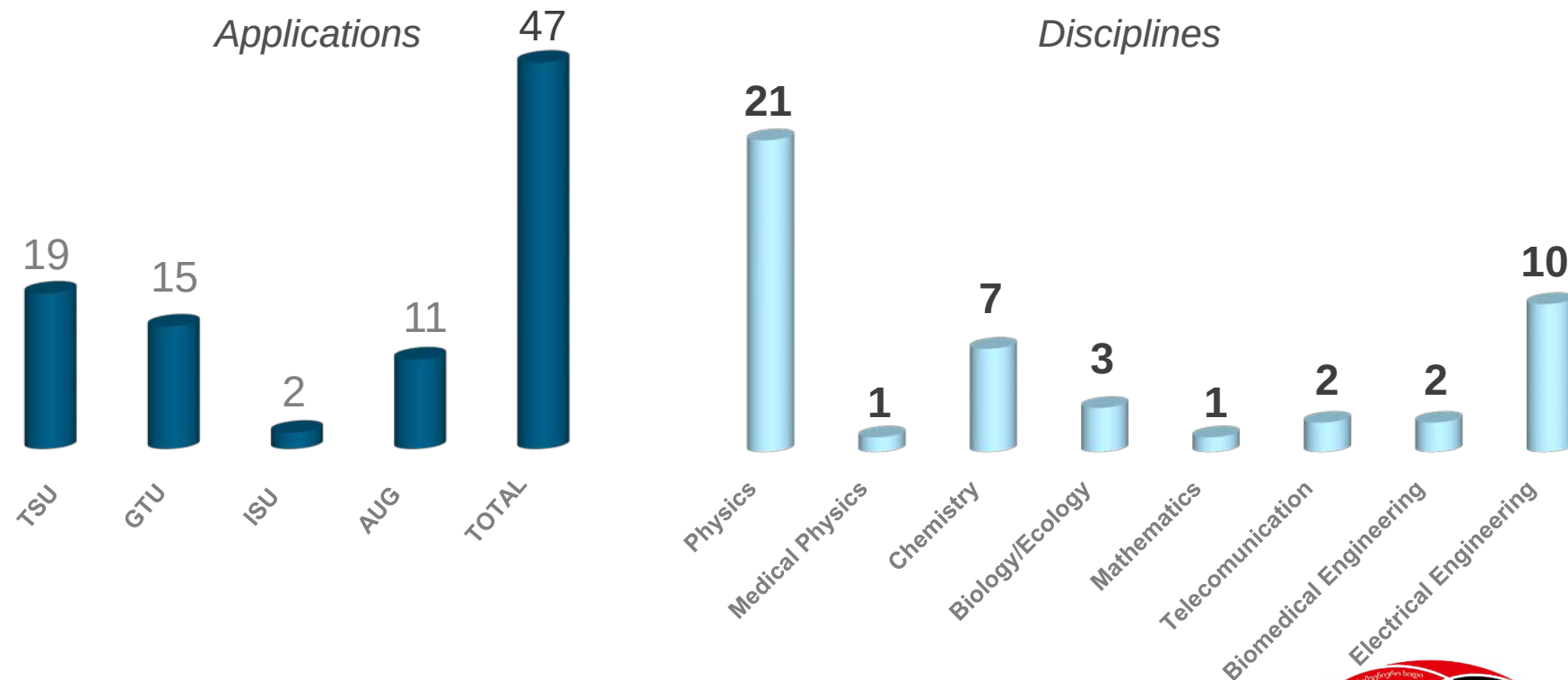


Prof. Dr. Astrid Klendler-Scharr (IEK-8) in front of SAPHIR Simulation of Atmospheric PHotochemistry in a large Reaction Chamber.



Prof. Dr. Gahleb Natour (ZEA-1) in front of a radiometer for measuring the moisture content in soils.

Applicants



Interviews: Why

- Top talents should receive an extraordinary promotion
- Limit number of traineeships available
- Selection process to identify the most talented and motivated students

The joint educational program within the GGSB framework offers participants of **Workshops & Summer Schools** and **Autumn Lectures** the possibility to apply for:

- A scholarship at SRNSF for performing Master or PhD thesis in Jülich
- Internships in Jülich

Interviews: Procedure

- 2 leading interviewers:
 - one institute director from Forschungszentrum Jülich
 - one representative from your home university
- Panel members listen in the background and may ask questions too



Interviews: Procedure



- 15 minutes per student
- 5 minutes self-presentation to start with (no slides)
 - What is your background
 - What is your favorite institute and why you are going for that specific one
 - What is your motivation to attend the QUALI-Start-Up Science Lectures
- 10 minutes questions on your scientific background

Interviews at TSU on June 6, 2017

Applicant	Interviewer Jülich	Interviewer TSU	Date	Time
Revaz Beradze	Hans Ströher	TSU representative	June 6	10:00
Lia Bejitashvili	Andreas Wahner	TSU representative	June 6	10:20
Genadi Bolkvadze	Detlev Gotta	TSU representative	June 6	10:40
Bakar Chargeishvili	Hans Ströher	TSU representative	June 6	11:00
Baia Gelashvili	Hans Ströher	TSU representative	June 6	11:20
Tornike Guliashvili	Detlev Gotta	TSU representative	June 6	11:40
Mari Jananashvili	Hans Ströher	TSU representative	June 6	13:00
Tamar Xatiashvili	Andreas Wahner	TSU representative	June 6	13:20
Luiza Kondjaria	Andreas Wahner	TSU representative	June 6	13:40
Lado Jibuti	Detlev Gotta	TSU representative	June 6	14:00
Mariam Maisuradze	Andreas Wahner	TSU representative	June 6	14:20
Revaz Nikolashvili	Hans Ströher	TSU representative	June 6	14:40
Gogita Papalashvili	Detlev Gotta	TSU representative	June 6	15:40
Guga Xundzakishvili	Detlev Gotta	TSU representative	June 6	16:00
Nino Papelishvili	Bernd Neumaier	TSU representative	June 6	16:20
Giorgi Kistauri	Hans Ströher	TSU representative	June 6	16:40
Tamar Maisuradze	Andreas Wahner	TSU representative	June 6	17:00
Eka Jalagonia	Bernd Neumaier	TSU representative	June 6	17:20
Papuna Navradashvili	Andreas Wahner	TSU representative	June 6	17:40

Interviews at GTU on June 7, 2017

Applicant	Interviewer Jülich	Interviewer GTU	Date	Time
Davit Sebua	Detlev Gotta	GTU representative	June 7	10:00
Elene Lortkipanidze	Hans Ströher	GTU representative	June 7	10:20
Natia Beriashvili	Detlev Gotta	GTU representative	June 7	10:40
Tatia Gonashvili	Andreas Wahner	GTU representative	June 7	11:00
Richard Kibler	Andreas Wahner	GTU representative	June 7	11:20
Ani Gogishvili	Bernd Neumaier	GTU representative	June 7	11:40
Shio Makatsaria	Hans Ströher	GTU representative	June 7	13:20
Aleksander Mujirishvili	Ghaleb Natour	GTU representative	June 7	13:40
Giorgi Kacharava	Bernd Neumaier	GTU representative	June 7	14:00
Salome Chilachava	Detlev Gotta	GTU representative	June 7	14:20
Giorgi Eliashvili	Ghaleb Natour	GTU representative	June 7	14:40
Levan Bostiashvili	Andreas Wahner	GTU representative	June 7	15:40
Aleksander Labadze	Bernd Neumaier	GTU representative	June 7	16:00
Elene Mandzulashvili	Hans Ströher	GTU representative	June 7	16:20
Michael Kitaevich	Bernd Neumaier	GTU representative	June 7	16:40

Interviews of ISU on June 7, 2017

Applicant	Interviewer Jülich	Interviewer ISU	Date	Time
Natia Porchkidze	Hans Ströher	ISU representative	June 7	17:00
Sofio Kiknavelidze	Andreas Wahner	ISU representative	June 7	17:20

Interviews will take place at GTU

Interviews at AUG on June 8, 2017

Applicant	Interviewer Jülich	Interviewer AUG	Date	Time
Alex. Kalandadze	Ghaleb Natour	AUG representative	June 8	10:00
Dimitri Goderdzishvili	Ghaleb Natour	AUG representative	June 8	10:20
Tornike Janashia	Detlev Gotta	AUG representative	June 8	10:40
Davit Kordzaia	Ghaleb Natour	AUG representative	June 8	11:00
Alex. Managadze	Ghaleb Natour	AUG representative	June 8	11:20
Grigol Grishashvili	Hans Ströher	AUG representative	June 8	11:40
Ana Sixarulidze	Ghaleb Natour	AUG representative	June 8	13:40
Davit Xasia	Detlev Gotta	AUG representative	June 8	14:00
Luka Mirianashvili	Ghaleb Natour	AUG representative	June 8	14:20
Ana Kurdadze	Bernd Neumaier	AUG representative	June 8	14:40
Bondo Abesadze	Ghaleb Natour	AUG representative	June 8	15:00

Assessment criteria

- **Self-presentation and behavior**
 - The interviewee deals well with the situation of the interview and responds and presents her/himself well-thought
- **Professional competencies**
 - The interviewee has a thorough knowledge of the basics and asks good questions on the subject
- **Motivation**
 - The motivation shown to attend the lectures is convincing
- **English language skills**
 - The interviewee is able to follow the questions and can express her/himself well

Assessment outcome

The results will be published
 at **Tbilisi State University (TSU)**
 on **Friday** (9th of June) at **15:00**



Conclusion

- Autumn Lectures “QUALI-Start-Up Science Lectures” first time in Jülich
- Jointly funded by Georgia and Jülich
- Further qualification for excellent students
- Option for 20 students to come to Jülich
- The interviews will be a good exercise and experience for all students

**We are excited to welcome
20 of you in Jülich in September.**

