

*International Summer School on*  
**Network Performance Evaluation and  
Optimisation**

**04 -08 August 2014**

**Hamburg University of Technology**

The summer school is organised for researchers and PhD students in the area Communication Networks. Master students in their final year can also apply for participation.

The **objective** of the summer school is to give a sound basis or refresh skills and expertise in tools and mathematical approaches used for modelling, optimization and evaluation of communication networks. This is in particular useful for PhD students and researchers looking for approaches and tools to evaluate and validate their innovations and new algorithms in communication networks.

We were able to win highly qualified and well-known lectures for the most important theories and tools for performance evaluation: network simulations, optimization and queuing theory.

One additional course is addressing the modelling and evaluation of Future Internet Architectures. In the middle of the five day summer school a workshop on selected topics is offered, co-organized by the ITG 5.2 work groups „Communication Networks and Systems“. Here different experts from industry and academia report in 30min talks on performance evaluation and issues of actual communication networks (Call for Presentations is still open).

The **simulation** course is given by **Prof. James Gross**, (KTH, Stockholm), one of the main authors of the book „Modelling and Tools for Network Simulation. **Dr. Slawomir Stanczak** (Fraunhofer HHI, TU Berlin), a co-author of the book „Fundamentals of Resource Allocation in Wireless Networks" is offering the lecture on **optimisation**. **Prof. Ulrich Killat** (TUHH, Hamburg), author of the book „Entwurf und Analyse von Kommunikationsnetzen“, is giving the course on **queuing theory**. Finally, **Prof. Kurt Tutschku** (Blekinge Institute of Technology, Karlskrona), well-known for his activities in Future Internet evaluation, is presenting the course on modelling **Future Internet architectures**.

We are looking forward to an inspiring summer school with fruitful discussion among students and lecturers.

**Programme**

	<b>Morning</b>	<b>Afternoon</b>
<b>Monday</b>	Simulation	Optimization
<b>Tuesday</b>	Simulation	Optimization
<b>Wednesday</b>	Workshop	Workshop
<b>Thursday</b>	Queueing Theory	Future Internet
<b>Friday</b>	Queueing Theory	Future Internet

### **Monday/Tuesday morning (Aug. 4<sup>th</sup> and 5<sup>th</sup>, 2014)**

**Prof. James Gross** (KTH Stockholm)

#### **Modeling and Tools for Network Simulation:**

Recent Status of Environments, Models and Research Directions

### **Monday/Tuesday afternoon (Aug. 4<sup>th</sup> and 5<sup>th</sup>, 2014)**

**Dr Slawomir Stanczak** (Fraunhofer Heinrich Hertz Institute, TU Berlin)

#### **Selected Theoretical Aspects of Optimization and Design of Wireless Communication Networks**

### **Wednesday Aug. 6<sup>th</sup>, 2014**

#### **TUHH/ITG 5.2.1**

#### **Workshop on Selected Topics on Performance Evaluation of Communication Networks**

Full day of short presentations on results and issues evaluating today's and future networks. This workshop is co-organized by VDE/ITG 5.2.1, the call for presentation is still open. Please check [www.tuhh.de/itg521](http://www.tuhh.de/itg521) for up to date information.

### **Thursday/Friday morning (Aug. 7/8th)**

**Prof. Ulrich Killat** (Hamburg University of Technology)

#### **Selected Topics from Queuing Theory**

### **Thursday/Friday afternoon (Aug. 7/8th)**

**Prof. Kurt Tutschku** (BTH, Karlskrona)

#### **Performance Modelling of Future Internet Architectures**

## **Fees and Registration**

Registration fees (**non-refundable**):

25 €: Hamburg University of Technology PhD student

75 €: (PhD) students from other universities

125 €: Other researchers.

**additional 25 € for registration after 20.07.2014**

All registration types include admission to the seminars, coffee breaks, course material and lunches.

Please check for more information and **register** at:

<http://www.tuhh.de/itg521/summer-school.html>

The Summer School is sponsored by the TUHH (Graduate Academy for Technology and Innovation) and co-organised by VDE/ITG Fachausschuss 5.2 "Communication Networks and Systems" as well as the Working Group 5.2.1 "Traffic Engineering and System Architectures"

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