Course Fee

The course fee for the PhD Summer School "Risk and Uncertainty" is 350 EUR. This fee includes lunch and participantion to all events, except the excursion and the optional Workshop on Friday.

The **PhD Summer School** is a series of academic programmes organized annually in rotation with the following three PHD Research Groups:

- DFG GRK 1462 "Evaluation of Coupled Numerical and Experimental Partial Models in Structural Engineering", Bauhaus-Universität Weimar
- DFG SFB 837 "Interaction Modeling in Mechanized Tunneling", Ruhr-Universität Bochur
- Vienna Doctoral Programme for the Exploration of Complex Water resources,
 Vienna University of Technology



Please find registration form and information about application procedure at the link below. Registration deadline is **30 June 2013**. www.uni-weimar.de/summerschool/register



PhD Summer School 2013

Bauhaus-Universität Weimar

Research Training Group 1462

Model Quality Assessment

Faculty of Civil Engineering

Risk and Uncertainty

26 - 29 August 2013 Lecture Room C Marienstraße 13

Outline

Our **International Summer School** will be devoted to the topic "Risk and Uncertainty." International experts are invited to train PhD candidates in the fields:

- Uncertainty Quantification and Meta-Modelling,
- (Model-based) Design of Experiments,
- · Risk, Reliability, Maintenance & Evaluability,
- Forecast Verification and Validation and
- Experimental Modeling and Simulation.

Optional: Excursion to a construction site in Thuringia will reveal the relation between research and applied engineering. (one afternoon) | one day - workshop focussing on discussions on the topic: Scientific Basics – Practical Challenges. (30th of August) Please contact us, if you are interested in one of these two offerings.

Course Topics

Rating of Optimization Techniques & Geotechnical Applications | Prof. T. Schanz, Ruhr-Universität Bochum | Meta-Modelling, Global Sensitivity Analysis and Probalistic Analysis of Failure in Mechanized Tunneling | M.Sc Shorash Miro, Ruhr Universität Bochum | Structural Perfomance Assessment and Prediction | Prof. A. Strauß, Universität für Bodenkultur Wien | Learning, Fusing & Assessing Models with Bayesian Methods | Prof. D. Straub, Technische Universität München | Integrated Deterministic & Probabilistic Safety Analysis: Methods and Case Studies | Dr. F. Di Maio, Politecnico di Milano | Operational Ensemble Forecasting in Meteo-Hydrology: from Implementation to Verification | Dr. F. Pappenberger, ECMWF | Imprecise Probabilities in Engineering | Prof. M. Beer, University of Liverpool | Mathematical Surrogate Models for Engineering Applications | Dr. T. Most, Dynardo | Inverse Modelling - Analysis of Contact Stress and Heat Flux During Rolling Process | Dr. Daniel Weisz-Patrault, Ecole Ponts Paris Tech | Numerical Simulation with Uncertain Data in Mechanized Tunneling | Dr. Steffen Freitag, Ruhr-Universität Bochum | Toward Optimal Experiment Design for Parameter Estimation in Linear Systems with Spatio-Temporal Dynamics | Prof. E. Rafajłowicz, Wrocław University of Technology

Registration and Housing

Online registration at www.uni-weimar.de/summerschool/register by 30 June 2013.

For the PhD Summer School we request each member to book their rooms for the period of their stay individually. We recommend the following:

Hostels | Labyrinth Hostel, Goetheplatz 6;

Jugendgästehaus Maxim Gorki, Zum Wilden Graben 12

Youth Hostels | Germania, Carl-August-Allee 13; Poseckscher Garten, Humboldtstr. 17

Once registered, each participant will get a detailed programme for the entire week and more information, including details to extra events and activities.

Contact

Spokesperson:

Prof. Dr.-Ing. habil. Frank Werner

Organisation Commitee:

Dipl.-Ing. Dipl.-Ing. Maximilian Huber | Prof. Dr. rer. nat. Tom Lahmer | Dipl.-Ing. Idna Wudtke

Research Training Group 1462 - Model Quality Assessment

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