

ALGORITHMIC OPTIMIZATION

The Research Training Group on Algorithmic Optimization (ALOP)
presents the
Autumn School 2017

Optimization in Machine Learning and Data Science

August 28—31, 2017
Trier University, Germany



www.alop.uni-trier.de

Welcome to the Autumn School 2017

Optimization in Machine Learning and Data Science

Mathematical optimization is a discipline of high importance for economy, science, industry, policy support, and the public and private sector. Due to practical demand and the rise of computing capabilities, experts proficient in this field are needed in research and development.

The research training group ALGORITHMIC OPTIMIZATION therefore focuses on research and education in this field.



Organizers:

Jan Pablo Burgard, Ralf Münnich, Ekkehard Sachs,
Volker Schulz, Sven de Vries

Program: Monday, August 28, 2017

Speaker: Stephen J. Wright, University of Wisconsin-Madison

Topic: Fundamental Algorithmic Approaches relevant to data analysis

| | | |
|---------------------|--|----------------------------|
| 8:00 am — 8:30 am | Registration | Ground Floor (Bldg. E) |
| 8:30 am — 9:00 am | Opening Remarks | HS 9 (Building E) |
| 9:00 am — 10:30 am | Lecture | HS9 |
| 10:30 am — 11:00 am | Coffee Break | E51 (Building E) |
| 11:00 am — 12:30 pm | Lecture | HS 9 |
| 12:30 pm — 2:00 pm | Lunch Break | AudiMax/Mensa Bldg. |
| 2:30 pm — 4:30 pm | Application | BZ37L (library-Bibliothek) |
| 5:00 pm | Welcome Reception with Poster Session | E51 (Building E) |

Program: Tuesday, August 29, 2017

Speaker: Stephen J. Wright, University of Wisconsin-Madison

Topic: Fundamental Algorithmic Approaches relevant to data analysis

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|---------------------|-----------------------|--|
| 8:30 am — 10:00 am | Lecture | HS9 |
| 10:00 am — 10:30 pm | Coffee Break | E51 |
| 10:30 am — 12:00 pm | Lecture | HS9 |
| 12:00 pm — 1:30 pm | Lunch Break | AudiMax/Mensa Bldg. |
| 2:00 pm — 4:00 pm | Open Panel Discussion | HS9 Future of Optimization in ML and DS: mathematical challenges and opportunities |
| 5:00 pm | Guided Tour of Trier | Meet at the Porta Nigra |

Program: Wednesday, August 30, 2016

Speaker: Tamara G. Kolda, Sandia National Laboratories

**Topic: Optimization Approaches for Fitting the Canonical
Tensor Decomposition**

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|---------------------|---|---------------------|
| 8:30 am — 10:00 am | Lecture | HS9 |
| 10:00 am — 10:30 am | Coffee Break | E51 |
| 10:30 am — 12:00 pm | Lecture | HS9 |
| 12:00 pm — 1:00 pm | Lunch Break | AudiMax/Mensa Bldg. |
| 1:00 pm — 5:00 pm | Application | BZ37L |
| 7:00 pm | Social Gathering “Weinstube Kesselstatt” Liebfrauenstr. 10 | |



Program: Thursday, August 31, 2017

Speaker: Julian Hall, The University of Edinburgh

Topic: High performance simplex methods

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|---------------------|----------------------------------|---------------------|
| 8:30 am — 10:00 am | Lecture | HS9 |
| 10:00 am — 10:30 am | Coffee Break | E51 |
| 10:30 am — 12:00 pm | Lecture | HS 9 |
| 12:00 pm — 1:00 pm | Lunch Break | AudiMax/Mensa Bldg. |
| 1:00 pm — 4:00 pm | Application | BZ37L |
| 4:00 pm — 4:30 pm | Coffee Break | E51 |
| 4:30 pm — 5:15 pm | Closing Session, Poster Award | HS9 |

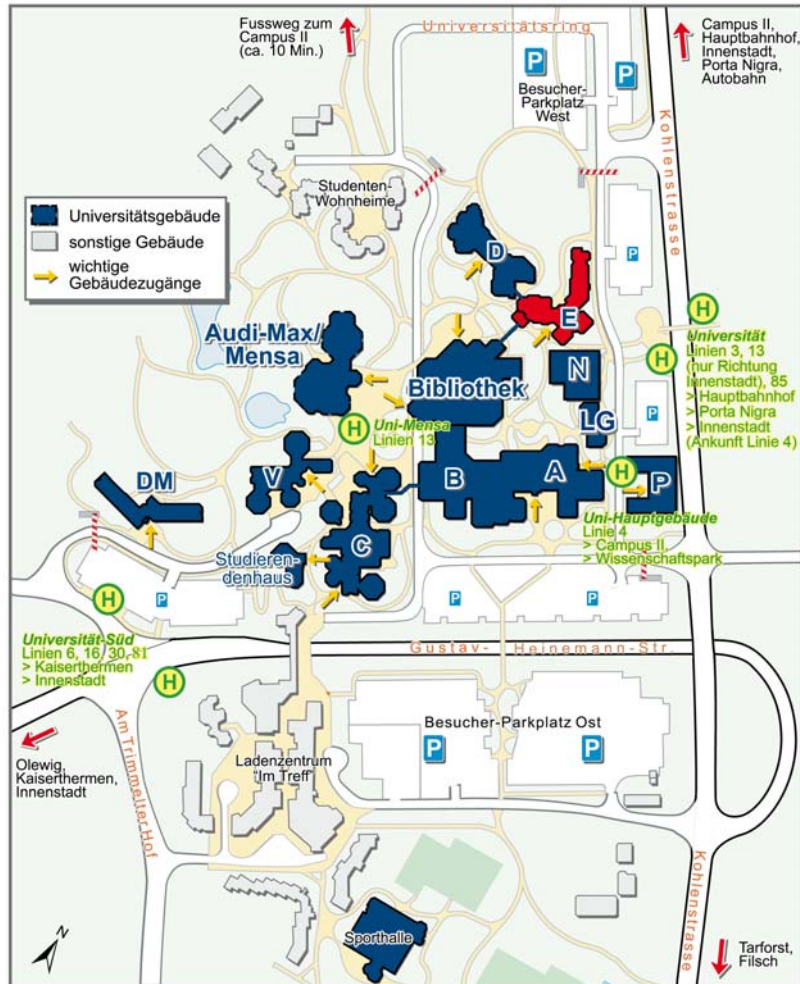
Location Map

The conference will take place in Building E (marked in red) on Campus I

Applications will take place in the Bibliothek building

Lunch will be in the Audi-Max/Mensa building

We gratefully acknowledge the support of the



DFG Deutsche
Forschungsgemeinschaft