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**Einstein Workshop
„Geometry and Physics in Computer Graphics“**

09 – 11 April 2018 at

TU Berlin, Institute of Mathematics,
lecture hall MA 041, Strasse des 17. Juni 136,
10623 Berlin



DGD

Discretization in
Geometry and Dynamics
SFB Transregio 109

Monday, 09 April 2018

- 09:00 – 09:30** **Registration** (near lecture hall)
- 09:30 – 09:45** **Welcome Address**
- 09:45 – 10:30** **Chris Wojtan: Water surface waves**
- 10:30 – 11:00* *Coffee*
- 11:00 – 11:45** **Helmut Pottmann: Discrete geometric structures motivated by applications in architecture**
- 11:45 – 13:45* *Lunch Break*
- 13:45 – 14:30** **Klaus Hildebrandt: Model reduction for elasticity-based shape processing**
- 14:30 – 15:00* *Coffee*
- 15:00 – 15:45** **Max Wardetzky: From shapes to shape spaces**
- 15:45 – 16:15* *Time for discussion (with coffee)*
- 16:15 – 17:00** **Niloy Mitra: Physics-priors for geometry reconstruction**
- 17:00 – 18:00* *Welcome Reception (1st floor)*

General information:

All talks will take place in lecture hall MA 041 on the ground floor of the math building.
Conference room MA 875, 8th floor of the math building, is available for further discussions.
Possible place for lunch: Staff cafeteria, 9th floor of the math building (on your own account).

Tuesday, 10 April 2018

- 09:15 – 10:00** Nils Thuerey: Deep learning for fluid simulations
- 10:00 – 10:30* Coffee
- 10:30 – 11:15** Nadav Dym: Linear algorithms for computing conformal mappings
- 11:15 – 11:45* Time for discussion (with coffee)
- 11:45 – 12:30** Bruno Lévy: A computational method for early universe reconstruction
- 12:30 – 14:30* Lunch Break
- 14:30 – 15:15** Rüdiger Westermann: Scalable topology optimization and beyond
- 15:15 – 15:45* Coffee
- 15:45 – 16:30** Johannes Wallner: Material-minimizing forms and structures
- 16:30 – 17:00* Time for discussion (with coffee)
- 17:00 – 18:00* Transfer to Brauhaus Lemke (by foot ca. 35 minutes or by bus ca. 15 minutes)
- Starting 18:00* Workshop Dinner at Brauhaus Lemke am Schloss Charlottenburg (on your own account)

Wednesday, 11 April 2018

- 09:15 – 10:00** Emanuele Rodolà: Spectral approaches to partial deformable shape matching
- 10:00 – 10:30* Coffee
- 10:30 – 11:15** Pierre Alliez: Optimal mass transport and application to inter-surface mapping
- 11:15 – 11:45* Time for discussion (with coffee)
- 11:45 – 12:30** Mirela Ben-Chen: Reversible harmonic maps between discrete surfaces
- 12:30 – 13:00** Concluding Remarks