

**Geometry + Simulation  
Obergurgl, Austria  
April 23 – April 25, 2014**



**G+Smo**



**Wednesday, April 23, 2014**

9:00-12:30	scientific discussion in groups
13:30	Lunch
14:00-15:30 MTU's group	David Gruber: Integral Design Concepts for Air Passages. Gabor Kiss: Adaptive fitting and CAD integration of THB-splines. Dominik Mokris: On the completeness of hierarchical tensor-product spline spaces.
15:30-16:00	Coffee break
16:00-17:30 EXAMPLE Linz	Florian Buchegger: "B-Spline bases on Multi-patch domains. Mario Kapl: Geometrically continuous test functions for IGA. Urska Zore: Adaptively Refined Multilevel Spline Spaces from Generating Systems.
18:30	Dinner
20:00-20:45 Carlotta Giannelli	THB-splines: theory, modeling, and adaptivity.

**Thursday, April 24, 2014**

9:30-12:30	Scientific discussion in groups
13:30	Lunch
14:00-15:30 Rumpf's group	Martin Rumpf: „Geodesic Paths in Shape Space“ - „minimizers of an action functional of the sets of finite perimeter, exploration of the space of shells, higher order time and space discretization of surface evolution, discrete geodesic calculus based on subdivision finite elements. Ricardo Perl: Higher Order Time and Space Discretizations for Gradient Flows and Geodesics in Subdivision Shell Space.
15:30-16:00	Coffee break
16:00-17:30 Zulehner's group	Katharina Rafetseder: Isogeometric Shape Optimization. Jarle Sogn: Cut-FEM – G+Smo – Turbin simulation.
18:30	Dinner
20:00-20:45 Giancarlo Sangalli	Isogeometric analysis for rubber simulation.

**Friday, April 25, 2014**

9:30-12:30	Scientific discussion in groups
13:30	Lunch
14:00-15:30 Scherzer's group	Roman Andreev: Jumplets Guozhi Dong: Isogeometric Regularization on Surfaces. Lukus Lang: Decomposition of Optical Flow on the Sphere.
15:30-16:00	Coffee break
16:00-17:30 Langers's group	Angelos Mantzaflaris: Geometry + Simulation Modules Stephen Moore: Discontinuous Galerkin Isogeometric Analysis for Elliptic PDEs on Surfaces and Polygonal Domains. Ioannis Toulopoulos: Applications of IGA method in multidomains for solving Elliptic Boundary Value Problems.
18:30	Dinner
20:00-20:45 Jüttler's group	Michael Pauley: Isogeometric segmentation: contractible solids with 3-vertex-connected edge graphs Andrea Bressan: A hierarchical approach to box-mesh construction (LR-splines)