

Isogeometric Analysis and Applications and final consortium meeting of EXCITING Linz, Austria, March 12-16, 2012



Monday, March 12, 2012

10:25-10:50	Jüttler, Bert	Opening
10:50-11:15	Takacs, Thomas	Approximation Properties for Singular Parameterizations in Isogeometric Analysis
11:15-11:40	Speleers, Hendrik	Isogeometric Analysis: from a NURBS to a NURPS geometry
11:40-13:30		Lunch
13:30-13:55	Simpson, Robert N.	An isogeometric boundary element method using T-splines
13:55-14:20	Xu, Gang	Local r-refinement for optimization of computational domain in isogeometric analysis
14:20-14:50		break
14:50-15:50	Bazilevs, Yuri	Applications of IGA to Coupled and Nonlinear Problems
15:50-16:00		break
16:00-16:25	Duvigneau, Régis	Sensitivity Computation and Design Optimization for Isogeometric Structural Analysis
16:25-16:50	Politis, C.G.	A BEM-ISOGOMETRIC method with application to the wavemaking resistance problem of surface piercing and fully submerged bodies
16:50-17:15	Kostas, K.V.	Isogeometric ship hull optimization with respect to wave resistance

Tuesday, March 13, 2012

08:30-09:30	Kvamsdal, Trond	Adaptive isogeometric finite element analysis using LR B-splines
09:30-10:00		break
10:00-10:05		opening remarks of the coordinator
10:05-10:40		WP 1: Propellers and Turbochargers
10:40-11:15		WP 2: Ship hulls
11:15-11:50		WP 3: Car components and frames
11:50-13:30		lunch
13:30-14:05		WP 4: Fluid-structure interaction
14:05-14:40		WP 5: Design optimization
14:40-15:10		break
15:10-15:45		WP 6: Isogeometric Toolbox
15:45-15:55		WP 7: Coordination, management, assessment, dissemination. Conclusion
15:55-16:00		Break
16:00-17:00	Gravesen, Jens	Parametrization in Isogeometric Analysis and Shape Optimization

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Wednesday, March 14, 2012

08:30-09:30	Grandine, Tom	The Role of Isogeometric Analysis in Industrial Design and Optimization
09:30-10:00		break
10:00-10:25	Dokken, Tor	Linear independence and Locally Refined B-splines
10:25-10:50	Scott, Michael A.	Isogeometric Analysis using T-splines
10:50-11:15	Vuong, Anh-Vu	Adaptive Hierarchical Local Refinement in Isogeometric Analysis
11:15-10:40	Giannelli, Carlotta	Adaptive approximation with truncated hierarchical B-splines
11:40-13:30		lunch
14:00		excursion to Andritz Hydro (14:30) and to Stahlwelt (16:00)
18:30		conference dinner (Promenadenhof)

Thursday, March 15, 2012

08:30-09:30	Pavarino, Luca Franco	Domain Decomposition preconditioners for Isogeometric Analysis
09:30-10:00		break
10:00-10:25	Pechstein, Clemens	An overview on domain decomposition methods
10:25-10:50	Kleiss, Stefan	IETI - Isogeometric Tearing and Interconnecting
10:50-11:15	Skytt, Vibeke	An Isogeometric Toolkit
11:15-11:40	Tae-Wan, Kim	On the structure of basis of splines space over hierarchical T-meshes
11:40-13:30		lunch
13:30-13:55	Voruganti, Hari presented by R. Klein	Volumetric Parameterization for Isogeometric Analysis
13:55-14:20	Weeger, Oliver	Isogeometric analysis of nonlinear beam vibrations
14:20-14:50		break
14:50-15:50	Hughes, Tom	Isogeometric Analysis: Recent Developments
15:50-16:00		break
16:00-16:25	Großmann, David	Volumetric Geometry Reconstruction and Isogeometric Simulation of Turbine Blades for Aircraft Engines
16:25-16:50	Kumar, Mukesh	Recovery based error estimators in Isogeometric Analysis
16:50-17:15	Hassani, Behrouz	A Generalized Isogeometrical Analysis approach for free and forced vibration analysis of solids

Friday, March 16, 2012

08:30-09:30	Manni, Carla	Non standard discretization techniques in IgA and local refinements
09:30-10:00		break
10:00-10:25	Gahalaut, Krishan P.S.	Multigrid methods for isogeometric discretization
10:25-10:50	Fußeder, Daniela	Adaptive Simulation and Error Estimation for Isogeometric Analysis
10:50-11:00		break
11:00-11:25	Schulz, Tino	Decomposing Envelopes of Rational Hypersurfaces
11:25-11:40		closing remarks
11:40-13:30		lunch