

# Final Program for SGA2016

	October 4, 2016 (Tuesday)	October 5, 2016 (Wednesday)	October 6, 2016 (Thursday)	October 7, 2016 (Friday)
7:30-9:00	Breakfast (covered) and registration 8:50-9:00 Welcome and Overview	Breakfast (covered) and registration	Breakfast (covered) and registration	Breakfast (covered) and registration
9:00 - 9:35	<b>Jochen Garcke</b> Suboptimal feedback control of PDEs by solving HJB equations on adaptive sparse grids	<b>Christoph Pflaum</b> Ritz-Galerkin Discretization of PDE's with Variable Coefficients on Sparse Grids Using Prewavelets	<b>Tucker Carrington</b> A new sparse-grid collocation method for solving the Schroedinger equation	<b>Toni Volkmer</b> Sparse high-dimensional FFT with applications to data mining
9:35 - 10:10	<b>Lee Ricketson</b> Sparse grid techniques for particle-in-cell schemes	<b>Yingda Cheng</b> An Adaptive Multiresolution Discontinuous Galerkin Method for Time-Dependent Transport Equations in Multi-dimensions	<b>Jingwei Hu</b> A Stochastic Galerkin Method for the Boltzmann Equation with High Dimensional Random Inputs Using Sparse Grids	<b>Bryan Quaifei</b> High-Order Adaptive Time Stepping for Vesicle Suspensions
10:10-10:45	Coffee Break(covered)	Coffee Break(covered)	Coffee Break(covered)	Coffee Break(covered)
10:45-11:20	<b>Abdellah Chkifa</b> A sparse grid collocation method based on LaVallée Poussin kernel.	<b>Miroslav Stoyanov</b> A Dynamically Adaptive Sparse Grids Method for Quasi-Optimal Interpolation of Multidimensional Functions	<b>Yanzhao Cao</b> Backward SDE method for nonlinear filtering problems	<b>Soeren Wolfers</b> Multi-index approximation of multilinear problems with applications to kernel-based methods in UQ
11:20-11:55	<b>Jens Oettershagen</b> Optimal Integration in Reproducing Kernel Hilbert spaces	<b>Kilian Röhner</b> Spatial Refinement for Sparse Grid Classifiers based on Online Density Estimation	<b>Peng Chen</b> Adaptive sparse quadrature for high-dimensional integration with Gaussian distribution: application to Bayesian inverse problems	<b>Alessandro Alla</b> Nonlinear Model Reduction via Dynamic Mode Decomposition
11:55-12:30	<b>Fabian Franzelin</b> Preserving Positivity of Sparse Grid Surrogates	<b>Peter Jantsch</b> Lebesgue constant for weighted Leja sequences on unbounded domains	<b>Nick Dexter</b> Global Reconstruction of Solutions to Parametric PDEs via Compressed Sensing	<b>Constantin Weiser</b> Computationally Efficient Estimation of Multinomial and Panel Probit Models
12:30-13:45	Lunch Break (covered)	Lunch Break (covered)	Lunch Break (covered)	Lunch Break (covered)
13:45-14:45	<b>C. T. Kelley (invited)</b> Sparse Grids and Computational Chemistry	<b>Raul Tempone (invited)</b> Multi-Index approximation and smoothing techniques with sparse grids	<b>Tino Ullrich (invited)</b> Hyperbolic cross approximation--past, present and future	<b>Kenneth Judd (invited)</b> High-Dimensional Challenges in Economic Modeling
14:45-15:20	<b>Julian Valentin</b> Gradient-Based Topology Optimization with B-Splines on Sparse Grids	<b>Hoang Tran</b> Polynomial approximation via compressed sensing of high-dimensional functions on lower sets	<b>Rai Prashant</b> Low-rank approximation based quadrature for fast evaluation of quantum chemistry integrals	<b>Anh Tran</b> Comparison between Kaucher interval arithmetic, polynomial chaos expansion on Smolyak sparse grids, and Monte Carlo sampling in Molecular Dynamics simulation
15:20-15:50	Coffee Break(covered)	Coffee Break(covered)	Coffee Break(covered)	Closing remarks
15:50-16:25	<b>Bastian Bohn</b> Sparse grid regression in the noiseless setting	<b>David Pfander</b> Performance-Portable Close-to-Peak Performance Regression on Spatially Adaptive Sparse Grids Using Auto-Tuning	<b>Dirk Pflüger</b> Fault tolerance and silent fault detection with the sparse grid combination technique	
16:25-17:00	<b>Peter Schober</b> Solving Dynamic Portfolio Choice Models in Discrete Time Using Spatially Adaptive Sparse Grids	<b>Markus Siebenmorgen</b> Smoothing the payoff of European basket options	<b>Mario Heene</b> Massively parallel computation of high-dimensional PDEs with the Sparse Grid Combination Technique	
17:00-17:35	<b>Diane Guignard</b> A posteriori error estimate and adaptive sparse grid algorithm for random PDEs	<b>Lorenzo Tamellini</b> A sparse version of IGA solvers	<b>Guannan Zhang</b> A multilevel reduced-basis method for parameterized PDEs	