Wolfgang Pauli Institute (WPI) Vienna

Workshop "Adaptive numerical methods for PDE's"

WPI Seminar Room C 714

(January 21 – 25, 2008)

Monday 21

9h30 :   Welcoming of the participants

9h45 :   Opening remarks

10h00-12h00 : Rudiger Verfurth "A review of roubust a posteriori error estimates" (Tutorial)

12h00-13h30 : Lunch break

13h30-15h30 : Endre Suli "Sparse finite element methods" (Tutorial)

15h30-16h : Coffee break

16h-18h :   Albert Cohen "Nonlinear approximation and adaptivity" (Tutorial)

Tuesday 22

10h00-12h00 : Rob Stevenson "Optimality of adaptive wavelet and finite element methods" (Tutorial)

12h00-13h30 : Lunch break

13h30-15h30 : Christoph Schwab "Deterministic, nonlinear approximation of stochastic PDEs" (Tutorial)

15h30-16h : Coffee break

16h-17h :   Martin Vohralik "Guaranteed (and robust) a posteriori error estimates in continuous and discontinuous Galerkin finite element and finite volume methods"

Wednesday 23

9h30-10h30 : Martin Campos-Pinto "Adaptive semi-Lagrangian schemes for the Vlasov equation"

10h30-11h : Coffee break

11h00-12h00 : Andreas Veeser "Adaptive approximation with Lagrange elements"

12h00-13h30 : Lunch break

13h30-14h30 : Andreas Zeiser "Adaptive eigenvalue computation for elliptic operators"

14h30-15h30 : Andrea Bonito "Quasi-optimal convergence rate of an adaptive discontinuous Galerkin method"

15h30-16h : Coffee break

16h-17h : Thomas Wihler "A Posteriori Error Estimation for Discontinuous Galerkin Methods"

Thursday 24

9h30-10h30 : Christoph Ortner "A Posteriori Existence in Numerical Computations"

10h30-11h : Coffee break

11h00-12h00 : Karlheinz Groechenig "Almost diagonalization of pseudodifferential operators with respect to Gabor frames"

12h00-13h30 : Lunch break

13h30-14h30 : Kunibert Siebert "Convergence of adaptive finite elements with and without lower bound"

14h30-15h30 : Gerrit Welper "Towards an adaptive scheme for convection-diffusion problems stabilized in a graph norm"

15h30-16h : Coffee break

16h-17h : Reinhold Schneider "Electronic structure calculations"

Friday 25

9h30-10h30 : Gantumur Tsogtgerel "Adaptive finite element algorithms for
solving the Einstein constraint equations in general relativity"

10h30-11h :   Coffee break

11h00-12h00 : Massimo Fornasier '"Compressive algorithms: beyond adaptive wavelet
methods in PDE's"

12h00-13h30 : Lunch break

13h30-14h30 : Claudio Canuto "TBA"

14h30-15h30 : Silvia Bertoluzza "TBA"