Numerical Analysis and Predictability of Fluid Motion University of Pittsburgh

Speakers

Eugenia Kalnay

Human and nature dynamics (HANDY): Modeling inequality and use of resources in the collapse or sustainability of societies

Traian Iliescu Large Eddy Simulation Reduced Order Modeling

Nan Jiang A fast algorithm to compute flow ensembles

Shane Ross

Lagrangian transport and mixing in fluids from geometric, probabilistic, and topological perspectives

Jeff Borggaard

Reduced-Order Compensators via Interpolatory Model Reduction

Xiu Ye Weak Galerkin Method and Its Applications

Giusy Mazzone On the motions of a liquid-filled pendulum

Aziz Takhirov Uniform inf-sup condition for the Brinkman problem in highly heterogeneous media

Alexander Lozovskiy

Unconditionally stable semi-implicit scheme for the monolithic FSI Finite Element method: application to hemodynamics

Venue

Department of Mathematics Thackeray Hall 704

Acknowledgment

University of Pittsburgh Mathematical Research Center

University of Minnesota Institute for Mathematics and its Applications

Paul D. Williams

Achieving Seventh-Order Amplitude Accuracy in Leapfrog Integrations

Alexander Linke

Towards pressure-robust mixed methods for the incompressible Navier-Stokes equations

Martina Bukač

A loosely-coupled scheme for the interaction between a fluid, elastic structure and poroelastic material

Leo G. Rebholz

Improved accuracy in algebraic splitting methods for Navier-Stokes equations

Hoang Tran

A sparse grid method for Bayesian uncertainty quantification with application to large eddy simulation turbulence models

Yong Li Fourth order Robert-Asselin type time filter

Mustafa Aggul

A high accuracy minimally invasive regularization technique for Navier-Stokes equations at high Reynolds number

Sarah Khankan Predictability of average temperatures using ensembles

Xuping Xie Approximate Deconvolution Reduced Order Modeling

Ali Pakzad Energy dissipation in turbulence

Organizers

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