数学与系统科学研究院

计算数学所系列学术报告

报告人：Prof. Abani Patra

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Title：

Geophysical Mass Flows: Modeling and Computing

邀请人：　　袁礼 研究员

Lecture time：

December 8 (周四):　14:30-16:00

Mass Flow Model Equations and Numerical Methods

Venue：Lecture Hall 311

December 9 (周五):　9:00-10:30

TITAN2D Computational Environment

Venue：Lecture Hall 311

December 12(周一): 9:00-10:30

Parameters, Sensitivity and Uncertainty

Venue：Lecture Hall 311

December 13(周二): 14:30-16:00

Hazard Maps, and Future Directions

Venue：Morningside Center of Mathematics 110

Abstract：

Mass flows consequent to volcanic activity pose a threat to life and property. This series of lectures will introduce geophysical mass flow modeling, and will describe the TITAN2D software package, a parallel, adaptive mesh solver for computing mass flows over natural terrain. The third lecture will address the parameters used in the model equations and in TITAN2D, and the sensitivity of output results to parameter uncertainty. The lectures will conclude with a discussion on the construction of hazard maps, and the modeling and computational challenges that have yet to be addressed.

欢迎大家参加！