Yulong Xing
, Courant Institute
xing@cims.nyu.edu

I work under the supervision of Prof. Andrew Majda at Courant Institute, New York University. His email is: jonjon@cims.nyu.edu. My research area is tropical meteorology. I am looking forward to learning a lot from this workshop. Below is my resume with publication included:

Yulong Xing Office: (212) 998-3027 Courant Institute of Mathematical Sciences Cellular: (646) 894-7476 251 Mercer Street, Room 906 Fax: (212) 995-4121 New York, NY 10012 Email: xing@cims.nyu.edu

Education

BROWN UNIVERSITY, Providence, RI

Ph.D., Mathematics, May 2006 Advisor: Chi-Wang Shu Thesis Title: High order well-balanced numerical schemes for hyperbolic systems with source terms

M.A., Mathematics, May 2005

M.A., Applied Mathematics, May 2004

UNIVERISTY OF SCIENCE AND TECHNOLOGY OF CHINA (USTC), Hefei, Anhui, P.R.China

B. Sc., Mathematics and Applied Mathematics, Special Class for the Gifted Young (SCGY), June 2002

Professional Appointment

NEW YORK UNIVERSITY, New York, NY

Assistant Research Scientist, Courant Institute of Mathematical Sciences, Sept 2006 - Present Mentor: Andrew Majda

Publications

Refereed Journal Articles (Appeared or Accepted)

Y. Xing and C.-W. Shu, High order finite difference WENO schemes with the exact conservation property for the shallow water equations, Journal of Computational Physics, v208 (2005), pp.206-227

Y. Xing and C.-W. Shu, High order well-balanced finite difference WENO schemes for a class of hyperbolic systems with source terms, Journal of Scientific Computing, v27 (2006), pp.477-494

Y. Xing and C.-W. Shu, High order well-balanced finite volume WENO schemes and discontinuous Galerkin methods for a class of hyperbolic systems with source terms, Journal of Computational Physics, v214 (2006), pp.567-598

Y. Xing and C.-W. Shu, A new approach of high order well-balanced finite volume WENO schemes and discontinuous Galerkin methods for a class of hyperbolic systems with source terms, Communications in Computational Physics, v1 (2006), pp.100-134

Y. Xing and C.-W. Shu, Application of high order well-balanced schemes to a class of hyperbolic systems with source terms, Boletin de la Sociedad Espanola de Matematica Aplicada, v34 (2006), pp.69-80

S. Noelle, Y. Xing and C.-W. Shu, High order well-balanced finite volume WENO schemes for shallow water equation with moving water, Journal of Computational Physics, to appear

Submitted Journal Articles

A.J. Majda, M. Mohammadian and Y. Xing, Vertically sheared horizontal flow with mass sources: a canonical balanced model, submitted to Geophysical Astrophysical Fluid Dynamics