Seminar Announcement

Centroidal Voronoi Tessellations and Applications to PDEs

Dr Qiang Du
Verne M. Willaman Professor of Mathematics
and Professor of Materials Science,
Pennsylvania State University

Date: 7 August 2009 (Friday)
Time: 3.30 pm – 4.30 pm
Venue: SPMS-Executive Classroom 2, MAS-03-07
School of Physical and Mathematical Sciences

Centroidal Voronoi Tessellation has become a useful tool in many applications ranging from image and data analysis to physics and biology. In this talk, we first introduce the concept of centroidal voronoi tessellations and then discuss the relevant mathematical theory and related applications. We focus, in particular, on drawing connections with various issues in the numerical solution of PDEs.

Speaker Biography

Dr. Qiang Du received his BS degree from the University of Science and Technology of China in 1983 and PhD from Carnegie-Mellon University in 1988. After first serving as a Dickerson instructor at the University of Chicago, he has held academic appointments at several universities and national labs including Michigan State, Iowa State, Carnegie Mellon, Hong Kong Science and Technology and Argonne. He is presently the Verne Willaman Professor of Mathematics and Professor of Materials Science at Penn State University. Dr. Du has published over 150 scientific papers and has been invited to speak at many research institutions and international conferences. He served as the chief scientist of the 973 project on "Large Scale Scientific Computing Research" in China from 1999 to 2004. He is now serving on editorial boards of several journals including SIAM Journal of Numerical Analysis, Discrete and Continuous Dynamic Systems, Applied Mathematics Research Exp., etc. Dr. Du received the Feng Kang prize in scientific computing in 2005, the faculty outreach and extension award at Iowa State University in 2000, the Frame faculty teaching award at Michigan State University in 1992, and the Eberly college of science medal at the Pennsylvania State University in 2006.

Host: Prof. Wang Desheng, Division of Mathematical Sciences, School of Physical and Mathematical Sciences

Queries to: Ms Denise Lim, deniselimrj@ntu.edu.sg, Tel: 6513 7428

SCHOOL OF PHYSICAL AND MATHEMATICAL SCIENCES
NANYANG TECHNOLOGICAL UNIVERSITY
SPMS-MAS-03-01, 21 NANYANG LINK, SINGAPORE 637371
FAX: +65 6515 8213 TEL: +65 6513 7423