ANALYSIS/PDE SEMINAR SERIES

TOPIC: Pointwise Estimate of Green Tensor of Stationary Stokes System and Asymptotics of the Navier-Stokes Flows in the Half Space

SPEAKER: Kyungkeun Kang, Yonsei University

TIME: 2:00pm-3:00pm, Monday, December 25, 2017

VENUE: Room 264, Geography Building, Zhongbei Campus (中北校区，地理楼 264 室)

HOST: Xingbin Pan, East China Normal University

ABSTRACT OF THE TALK

We study the spatial asymptotics of stationary solutions of the incompressible Navier-Stokes equations in the half space by refined pointwise estimates of the Green tensor of the Stokes system in the half space. We also discuss the asymptotics of fast decaying flows in the whole space and exterior domains as well as axisymmetric self-similar solutions.

BIOGRAPHY

Kyungkeun Kang obtained his Ph.D. in Mathematics from University of Minnesota in June 2002. After that, he spent two years at Max Planck Institute for Mathematics in the Sciences in Leipzig and another two years at University of British Columbia and Pacific Institute for the Mathematical Sciences (PIMS) as a Postdoc. From 2005 to 2011, he was faculty of Mathematics at Sungkyunkwan University. He then joined Yonsei University in 2011 and has been Professor of Mathematics since March 2014. His research interests lie in fluid equations (e.g. Navier-Stokes equations) and chemotaxis models (e.g. Keller-Segel equations).