

Shokaku Mathematical Lecture Series

by

Professor Lawrence C. Evans

+ Nonlinear PDE satellite Workshop

Date 20 afternoon - 22 morning, July, 2016

Place Kawai Hall, Mathematical Institute
Faculty of Sciences, Tohoku University

Program

20 July (Wednesday)

14:00–14:05 Opening Ceremony

14:05–15:05 **Lawrence C. Evans** (University of California, Berkeley)
Weak convergence methods for adiabatic invariance

15:30–16:20 KEISUKE TAKASAO (Tokyo University)
Phase field method for mean curvature flow with transport term

16:30–17:20 TAKESHI OHTSUKA (Gunma University)
A level set method for evolution of spirals and its numerical
simulations for crystal growth with evolving spiral steps

21 July (Thursday)

10:00–11:00 **Lawrence C. Evans** (University of California, Berkeley)
PDE methods for principal/agent problems

11:20–12:10 HIROYOSHI MITAKE (Hiroshima University)
On rate of the convergence for the vanishing discount problem

- lunch break -

- 13:30–14:20 KATSUYUKI ISHII (Kobe University)
Convergence of a threshold-type algorithm for
curvature-dependent motions of hypersurfaces
- 14:30–15:20 ATSUSHI NAKAYASU (Tokyo University)
A viscosity approach for fully nonlinear PDEs with fractional
time derivatives
- 15:40–16:30 MASAKI OHNUMA (Tokushima University)
A strong comparison principle of semicontinuous viscosity
solutions for the prescribed mean curvature equation
- 16:40–17:30 NORIHISA IKOMA (Kanazawa University)
Existence and nonexistence of positive solutions of equations
involving the Pucci operators

- reception at downtown -

22 July (Friday)

- 10:00–11:00 **Lawrence C. Evans** (University of California, Berkeley)
Asymptotic methods for reaction/diffusion PDE
- 11:30–12:20 HITOSHI ISHII (Waseda University)
The vanishing discount problem and viscosity Mather measures

- Professor Evans is invited for Shokaku Mathematical Lecture Series by the Kawai Foundation.
- The satellite workshop is supported by Grant-in-Aid for Scientific Research (S) (No. 25220702, Takayoshi Ogawa) of JSPS.

Shigeaki Koike (Tohoku University)
e-mail: koike@math.tohoku.ac.jp
Tel&Fax: 022-795-5773