

Nonlinearity Workshop in Tottori 2012〔鳥取非線形研究会 2012〕

Date: 2012-Oct-29 (Mon), 30 (Tue) [Excursion: 31 (Wed)]

Place: Tottori University, Fac. Engineering, Bldg. Graduate School 6F, Grand Seminar Room
鳥取大学工学部 大学院棟6階 大ゼミナール室

Schedule

Oct 29 (Mon)

Chair: Akio NAKAHARA

10:30–10:35 Opening address

10:40–11:10 Masaru FURUKAWA (古川勝) (Tottori Univ.)

A new matching method for stability analysis of boundary-layer-type MHD modes in magnetized plasmas

11:15–11:45 Naoki YOSHIOKA (吉岡直樹) (Kyoto Univ.)

Phase transition in peristaltic transport of frictionless granular particles

<< lunch >>

<< kakenhi plasticity collaboration meeting (members only) >>

Chair: Michio OTSUKI

13:00–13:30 Nobuyasu ITO (伊藤伸泰) (Univ. Tokyo)

Molecular dynamics simulation of gas bubble nucleation

13:35–14:05 Takahiro HATANO (波多野恭弘) (ERI, Tokyo)

Relaxation dynamics of dense amorphous systems

<< tea break >>

Chair: Takeshi MATSUMOTO

14:20–14:50 So KITSUNEZAKI (狐崎創) (Nara Women's Univ.)

Crack condition in a drying process

14:55–15:25 Akio NAKAHARA (中原明生) (Nihon Univ.)

Rewriting experiment of memory in paste and its implication: how is the memory of vibration kept in the paste?

<< tea break >>

Chair: So KITSUNEZAKI

15:45–16:35 Tapati DUTTA (St. Xavier's College, Kolkata, India)

Porosity and permeability changes in sedimentary rocks induced by injection of reactive fluid: A simulation model

16:40–17:10 Tsuyoshi MIZUGUCHI (水口 毅) (Osaka Pref. Univ.)

Possible scenarios for multilayer structure formation of columnar joints

–17:30 Free discussion

17:30 Group photo 1

19:00– Banquet (Train: JR Tottori Daigaku mae 18:21, Tottori 18:29)
Uo Man Tottori-eki mae (魚萬 鳥取駅前店)

Oct 30 (Tue)

10:30–11:30 Laboratory tour: fluid experiments (assemble in Seminar Room 2701)
 << lunch >>

Chair: Susumu GOTO

13:00–13:30 Hiroki ITO (伊藤弘樹), OOSHIDA Takeshi (大信田丈志) (Tottori Univ.)
Changes in behavior of waves on shallow water oscillated horizontally in relation to emergence of vortices

13:35–14:25 Sujata TARAFDAR (Jadavpur Univ., Kolkata, India)
Squeeze flow experiments on Newtonian and Non-Newtonian fluid
 << tea break >>

Chair: Tapati DUTTA

14:35–15:05 Ryo MURAKAMI (村上亮) (Kyoto Univ.)
Superelastic collisions of isothermal elastic spheres

15:10–16:00 KUN Ferenc (Debrecen Univ., Hungary)
Modeling acoustic emissions during the fracture of geo-materials
 << tea break >>

Chair: OOSHIDA Takeshi

16:10–16:40 Chiyori URABE (占部千由) (FIRST, Aihara-Project; IIS, Tokyo), Kazuyuki AIHARA (合原一幸) (IIS, Tokyo)
Effects of mobility reduction on final size of infectious diseases

16:45–17:15 Shin-ichi ITO (伊藤伸一), Satoshi YUKAWA (湯川 諭) (Osaka Univ.)
Stochastic modeling for dynamical scaling law of drying crack patterns

–17:30 Free discussion

17:30–17:40 Closing address & Group photo 2

Information available at:

<http://www.damp.tottori-u.ac.jp/~ooshida/seminar/workshop1210.html>

Organized/Supported by:

- Kakenhi Project “統計力学と流体力学のコラボレーションによる塑性流動と乱流の新理論の展開” (Collaboration of statistical mechanics and fluid mechanics for development of new theories of plastic flows and turbulence); JSPS, Kakenhi (C) 24540404 (PI: OOSHIDA Takeshi)
- Kakenhi Project “ペーストと破壊の相互作用” (Interaction of cracks and paste); JSPS, Kakenhi (C) 23540452 (PI: So KITSUNEZAKI)

Co-organized by:

- DST-JSPS Joint Project: Effect of competing mechanical and electromagnetic perturbation on formation of surface cracks
- HAS-JSPS Joint Project: From the dynamics of cracks to the prediction of catastrophes