

ICADD11 PROGRAMME

Monday 26 August 2013

12:00 ~ 19:00

Registration : At the Lobby of Nikko Hotel Fukuoka

ICADD11 PROGRAMME

Tuesday 27 August 2013

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| 08:45 ~ 09:10 | Registration : At Venue | |
| 09:10 ~ 09:20 | Opening Ceremony | |
| 09:20 ~ 10:50 | Keynote Lecture 1 | Chairperson: Yuzo Ohnishi |
| 09:20 ~ 09:50 | Basic theory of two dimensional and three dimensional contacts | <i>Genhua Shi</i> |
| 09:50 ~ 10:20 | Practical applications of DDA to disaster prevention | <i>Guangqi Chen</i> |
| 10:20 ~ 10:50 | Next generation discontinuous rock mass models: 3-D and rock-fluid interaction | <i>Nicholas Sitar</i> |
| 10:50 ~ 11:10 | Coffee Break | |
| 11:10 ~ 12:35 | DDA Session 1 | Chairpersons: Yujing Jiang, Linrong Xu |
| 11:10 ~ 11:40 | Keynote Lecure: Application of DDA and NMM to practical problems in recent insight | <i>Yuzo Ohnishi</i> |
| 11:40 ~ 11:55 | Coupled thermo-mechanical and hydro-mechanical discontinuum models for simulating rock cracking | <i>Yuyong Jiao</i> |
| 11:55 ~ 12:10 | Development of a model for simulating hydraulic fracturing with DDA | <i>Yuxing Ben</i> |
| 12:10 ~ 12:25 | Mixed higher-order Discontinuous Deformation Analysis | <i>Bo Lu</i> |
| 12:25 ~ 12:35 | Poster introduction | <i>Mitsuteru Asai</i> |
| 12:35 ~ 13:30 | Lunch & Poster Session 1 | |
| 13:30 ~ 15:00 | DEM/SPH Session 1 | Chairpersons: Yasuhiro Mitani, Gonghui Wang |
| 13:30 ~ 14:00 | Keynote Lecure: Advanced particle methods for accurate and stable computation of fluid flows | <i>Hitoshi Gotoh</i> |
| 14:00 ~ 14:15 | Application of discrete crack analysis to concrete structures using HPM | <i>Yoshihiro Fujiwara</i> |
| 14:15 ~ 14:30 | CFD-DEM simulations for injection of cement-based grout -the effect of particle size- | <i>Shinya Sakakibara</i> |
| 14:30 ~ 14:45 | Implementation of Macroscopic Strength Criterion for Distinct Lattice Spring Model | <i>Gaofeng Zhao</i> |
| 14:45 ~ 15:00 | Nature frequency identification of mountain tunnel lining built with poling-board method | <i>Yang Gao</i> |
| 15:00 ~ 15:15 | Coffee Break | |
| 15:15 ~ 16:45 | NMM Session 1 | Chairpersons: Zixin Zhang, Tomofumi Koyama |
| 15:15 ~ 15:45 | Keynote Lecure: HOSS: An intergrated platform for dicontinua simulations | <i>Antonio A. Munjiza</i> |
| 15:45 ~ 16:00 | An explicit version of the numerical manifold method and its applications | <i>Guowei Ma</i> |
| 16:00 ~ 16:15 | The mathematical algorithm of multi-point constraints in the simulations of three-dimensional Numeric Manifold Method | <i>Yanqiang Wu</i> |
| 16:15 ~ 16:30 | High rock slope stability analysis using manifold method | <i>Junsheng Song</i> |
| 16:30 ~ 16:45 | Preliminary research of Numerical Manifold Method based on partly overlapping rectangular covers | <i>Haidong Su</i> |
| 19:00 ~ 21:00 | Welcome Reception | |

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Wednesday 28 August 2013

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| All day | Registration : At Venue | |
| 09:00 ~ 10:30 | Keynote Lecture 2 | Chairperson: Nicholas Sitar |
| 09:00 ~ 09:30 | Site response analysis with two-dimensional DDA | <i>Yossef Hatzor</i> |
| 09:30 ~ 10:00 | The DDD method based on combination of RFPA and DDA | <i>Chunan Tang</i> |
| 10:00 ~ 10:30 | A personal perspective on the Discontinuous Deformation Analysis | <i>Jeen-Shang Lin</i> |
| 10:30 ~ 10:50 | Coffee Break | |
| 10:50 ~ 12:20 | DEM/SPH Session 2 | Chairpersons: Xiaowu Tang, Satoshi Nishiyama |
| 10:50 ~ 11:20 | Keynote Lecture: Confined-unconfined seepage analysis using Numerical Manifold Method with an Energy-Work-Based Model | <i>Yuan Wang</i> |
| 11:20 ~ 11:35 | Numerical simulation of arch dam failure by 3D deformable distinct element method | <i>Yanli Hou</i> |
| 11:35 ~ 11:50 | Development of Combined RBMSM-DEM | <i>Tadao Yagi</i> |
| 11:50 ~ 12:05 | A small laboratory test and discontinuous modeling using DEM on flexural toppling failure of rock slopes | <i>Hiroshi Ueda</i> |
| 12:05 ~ 12:20 | Numerical study for relocation of buddha statue in south Korea | <i>Sunghoon Ryu</i> |
| 12:20 ~ 12:30 | Poster introduction | <i>Lu Zheng</i> |
| 12:30 ~ 13:30 | Lunch & Poster Session 2 | |
| 13:30 ~ 15:00 | Other Numerical Methods Session | Chairpersons: Aiqing Wu, Wanju Bo |
| 13:30 ~ 14:00 | Keynote Lecture: Study on transmission of elastic waves through jointed rocks using numerical simulations | <i>T.G. Sitharam</i> |
| 14:00 ~ 14:15 | Finite Element Simulation of co-seismic displacement taking topography into account | <i>Xiaoguang Lin</i> |
| 14:15 ~ 14:30 | Crust deformation & the model deduction of generation mechanism of Wenchuan earthquake | <i>Wanju Bo</i> |
| 14:30 ~ 14:45 | Numerical analysis of working mechanism for cable-stayed safety netting system | <i>Zhixiang Yu</i> |
| 14:45 ~ 15:00 | Design of impact experimental field for safety netting system | <i>Tao Wei</i> |
| 15:00 ~ 15:15 | Coffee Break | |
| 15:15 ~ 16:45 | DDA Session 2 | Chairpersons: Tsuyoshi Nishimura, Tingkai Nian |
| 15:15 ~ 15:30 | Numerical studies on in-situ rockfall experiments using 3D-DDA | <i>Takeshi Sasaki</i> |
| 15:30 ~ 15:45 | Examination about the predictive precision of the rockfall behavior by the numerical simulation | <i>Guichen Ma</i> |
| 15:45 ~ 16:00 | A case study of the hazard analysis for rock slope by using DDA | <i>Shigeru Miki</i> |
| 16:00 ~ 16:15 | Thermally vs. seismically induced block displacements in rock slopes | <i>Dagan Bakun-Mazor</i> |
| 16:15 ~ 16:30 | Wave propagation simulation in jointed rock bars by the discontinuous deformation analysis | <i>Youjun Ning</i> |
| 16:30 ~ 16:45 | DDA simulations of large landslides triggered by the Wenchuan earthquake | <i>Fei Cai</i> |
| 19:00 ~ 21:00 | Banquet | |

ICADD11 PROGRAMME

Thursday 29 August 2013

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| 09:00 ~ 10:30 | Keynote Lecture 3 Chairpersons: <i>Xiating Feng, Guangqi Chen</i> | |
| 09:00 ~ 09:30 | Stochastic key block analysis of underground excavations | <i>Guowei Ma</i> |
| 09:30 ~ 10:00 | Interaction analysis of 3D multiphase fluids and deformable bodies | <i>Chung-Yue Wang</i> |
| 10:00 ~ 10:30 | Some developments on the numerical manifold methods | <i>Hong Zheng</i> |
| 10:30 ~ 10:50 | Coffee Break | |
| 10:50 ~ 12:20 | DDA Session 3 Chairpersons: <i>Takeshi Sasaki, Jian-Hong Wu</i> | |
| 10:50 ~ 11:20 | Keynote Lecture: DDA/NMM developments and applications in Nanyang Technological University, Singapore | <i>Zhiye Zhao</i> |
| 11:20 ~ 11:35 | Ground pressure modelling by using Discontinuous Deformation Analysis | <i>Yanan Gao</i> |
| 11:35 ~ 11:50 | Stability analysis of rock caverns under different in-situ stress using the DDA based hydro-mechanical coupled model | <i>Huimei Chen</i> |
| 11:50 ~ 12:05 | Rock mass stability analysis based on contact mode using DDA | <i>Lu Zheng</i> |
| 12:05 ~ 12:20 | A framework for the rock engineering data exchange and sharing based on ontology | <i>Zhenya Shen</i> |
| 12:20 ~ 13:30 | Lunch | |
| 13:30 ~ 15:00 | DDA Session 4 Chairpersons: <i>Hemanta Hazarika, Yuyong Jiao</i> | |
| 13:30 ~ 13:45 | Improvement of Open-Close Iteration in DDA | <i>Jian-Hong Wu</i> |
| 13:45 ~ 14:00 | Design and implementation of software architecture for DDA | <i>Xiaolong Cheng</i> |
| 14:00 ~ 14:15 | Detailed investigation of near-fault earthquake loading induced displacement of sliding system by the discontinuous deformation analysis (DDA) | <i>Yingbin Zhang</i> |
| 14:15 ~ 14:30 | Application of the NDDA method in the slope stability analysis | <i>Qian Tian</i> |
| 14:30 ~ 14:45 | Combining GIS and DDA for preliminary rockfall risk assessment in Gunung Kelir area Yogyakarta Indonesia | <i>Guruh Samodra</i> |
| 14:45 ~ 15:00 | Development of elasto-plastic NMM-DDA with modified cam-clay model considering subloading surface and its application to the stability analysis of masonry structure in Angkor Thom, Cambodia | <i>Ryota Hashimoto</i> |
| 15:00 ~ 15:15 | Coffee Break | |
| 15:15 ~ 16:45 | NMM/KB Session 2 Chairpersons: <i>Jae-Joon Song, Junsheng Song</i> | |
| 15:15 ~ 15:30 | Numerical analysis of mining-induced seismicity using manifold method | <i>Renshu Yang</i> |
| 15:30 ~ 15:45 | Stability investigations around a cross harbor tunnel by a morphological visualization method | <i>Zixing Zhang</i> |
| 15:45 ~ 16:00 | Unified Analysis Method of Removability and Stability of Rock Blocks | <i>Yinhe Zheng</i> |
| 16:00 ~ 16:15 | Key block theory application for surrounding rock mass of underground powerhouse in Dagangshan Hydropower Project | <i>Jiaying Dong</i> |
| 16:15 ~ 16:30 | Seismic Stability Analysis against Overturning for a Tension-crack Rock Slope Subjected to Water Pressure and Surge | <i>Tingkai Nian</i> |
| 16:30 ~ 17:00 | Discussion and Closing Ceremony | |
| | <ol style="list-style-type: none"> 1. Report of ISRM Commission on Discontinuous Deformation Analysis 2. Free discussion 3. About the next ICADD | |

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Tuesday 27 August 2013

| 12:35 ~ 13:30 | Poster Session 1 | Chairpers on: Mitsuteru Asai |
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| | A new contact method using multi-sphere covers for 3D discontinuous deformation analysis | <i>Hehua Zhu</i> |
| | High rock slope stability analysis based on current stress state during excavation using the numerical manifold method | <i>Wenbo Zheng</i> |
| | A numerical simulation of volumetric enlargement for seismic debris flow using integrated DDA and KANAKO 2D | <i>Zheng Han</i> |
| | Mechanism of shallow rainfall-induced landslide and simulation of initiation with DDA | <i>Hong Zhang</i> |
| | Study on soil arching effects of stabilizing piles using numerical methods | <i>Fusong Fan</i> |
| | Simulation of land subsidence in north China based on campaign GPS data in a decade | <i>Guohua Yang</i> |
| | Analysis on seismic cycle of Xianshuhe fault zone with post-seismic deformation | <i>Fang Du</i> |
| | Coseismic displacements of the 2011 Tohoku-Oki earthquake measured by high-rate GPS | <i>Wei Zhan</i> |
| | Evolution from step-overs to bends on strike-slip faults: A 3D dynamic model | <i>Hui Wang</i> |

Wednesday 28 August 2013

| 12:30 ~ 13:30 | Poster Session 2 | Chairperson: Lu Zheng |
|---------------|---|------------------------------|
| | Large scale tsunami simulation by a particle method with a real geography | <i>Mitsuteru Asai</i> |
| | Fundamental study of rockfall simulation applying the Monte Carlo analysis by DDA | <i>Tetsuya Shimauchi</i> |
| | Measurement management of rock slope monitoring using DDA | <i>Satoshi Nishiyama</i> |
| | Simulation of steep coal seam mining based on discontinuous deformation analysis method | <i>Zhiqiang Liu</i> |
| | Assessment of functional effects of the existing preventive structures during landslides | <i>Yange Li</i> |
| | Stability analysis of breakwater in terms of seepage flow using DDA | <i>Tsukasa Kawakami</i> |
| | Modeling and prediction of the mechanical interaction between soil and tillage tool by DEM | <i>Toshihisa Fukuda</i> |
| | Animating soft cables based on constraint multi-rigid body system | <i>Qinghai Miao</i> |
| | A meshless local Petrov-Galerkin method with the universal Kriging interpolation for heat conduction problems | <i>Qing Xu</i> |