

Preliminary programme

ALERT 2012 Workshop

Session 2 (Tuesday, 2.10) - Geomechanics of underground structures

Session 2a (tunnelling) – morning 2.10

Keynote lecture

Prof. G. Anagnostou, ETH Zurich, Switzerland, The effect of tunnel advance rate on deformations and stability in tunnelling

Ordinary presentations

Bilotta, E., Silvestri, F.; University of Napoli Federico II, Italy, Round Robin numerical Test on Tunnels under seismic loading

K.S. Wong, Hong Kong University of Science and Technology, China, Centrifuge and numerical investigation of passive failure and deformation mechanism in sand

Arroyo, M., Gonzales, N. A., Gens, A. and Rouainia, M.; UPC Barcelona, Spain, Application of a kinematic hardening structured soil model to undrained excavation of a tunnel in London clay

Kolymbas, D., University of Innsbruck, Austria, Cavity expansion in cross-anisotropic linear-elastic rock

Topa, A., Vaunat, J., UPC Barcelona, Spain; Sequential excavation of an elliptical shaft in a weathered granite

Lisjak A., Tatone, B.S.A., Grasselli, G., University of Toronto, Canada, Numerical modelling of the anisotropic mechanical behaviour of Opalinus Clay using FEM/DEM

Amin, A., Ramezanzadeh, A., Esmail, J. S. M., Benoit, B., Shahrood University of Technology, Iran, Impact of Geomechanical Parameters on Stability of Natural Gas Storage Salt Cavern

Pahlavan, B. Hosseini, S. M., Ramazanzadeh, A., Gamanehkav consulting engineers, Tehran, Iran, In situ stress measurement for hydro-electric projects using hydrofracturing tests- two Iranian case studies

Session 2b (excavations) – afternoon 2.10, first part

Keynote lecture

Viggiani, G., Università di Roma Tor Vergata, Italy, *Numerical modelling of installation effects for diaphragm walls in sand*

Ordinary presentations

Tamagnini, C., Miriano, C., University of Perugia, Italy, *FE modeling of seismic response of diaphragm walls in sand using advanced constitutive models*

Session 2c (tunnelling and other problems related to nuclear waste storage) – afternoon 2.10, second part

Ordinary presentations

Pellet, F. L., Kamel, T., Xiaoqin, L., INSA Lyon, France, *Numerical modeling of time dependent deformation leading to small or large convergences of underground openings*

Levasseur, S., Collin, F., Bertrand, F., Charlier, R., Université de Liège, Belgium, *Anisotropic hydro-mechanical modelling of HGA field-scale experiment in Opalinus Clay*

Plassart, R., Raude, S., Centre d'Ingénierie Hydraulique (CIH) – EDF, France, *Hydro-Mechanic coupled modelling of an experimental gallery with viscoplastic approach and permeability function of rock degradation*

Yao Chi, Wanqing Shen, Qinghui Jiang, Jianfu Shao, Polytech-Lille, France, *A modified RBSM method for simulation of stress effects on flow and transport process in fractured rocks*

Pardoën, B., Collin, F., Levasseur, S., Charlier, R., Université de Liège, Belgium, *Modelling the excavation damaged zone in Callovo-Oxfordian claystone with strain localization*

Ebrahimi, A. N., Wittel, F. K.A, Raújo, N. A. M., Herrmann, H. J. Computational Physics for Engineering Materials, IfB, ETH Zurich, Switzerland, *Flow Across Interacting Fractures*

Eijnden, B. v. d., UJF, INP-G, CNRS, 3SR Lab, Grenoble, France, *Two scale modelling of hydro-mechanical behaviour of clayey rocks*