You are invited to participate at the course

COMPUTATIONAL MECHANICS II

held under the project „Educational and scientific collaboration CR-Iceland: computational mechanics, geothermal energy and further applications" (supported by EEP/Norway funds). **The course is a free continuation of the course Computational Mechanics I (plasticity) and is designed for students, PhD students and researchers.**

Program

1.12. 2010 from 14.00

Opening
D. Lukáš (VŠB-TU) **Parallel BEM-based methods**
J. Valdman (U Iceland) **Aposteriori error estimates (1)**
H. Palsson (U Iceland) **Computational fluid dynamics with OpenFOAM(1)**

2.12. 2010 from 9.00

J. Valdman (U Iceland) **Aposteriori error estimates (2)**
H. Palsson (U Iceland) **Computational fluid dynamics with OpenFOAM(2)**
O. Axelsson (I Geonics) **Preconditioning for saddle point problems**
M. Neytcheva (U Uppsala) **Augmented Lagrangian preconditioning**
from 13.00
J. Kruis (CTU Prague) **Damage mechanics analysis with arc-length solver**
Z. Dostál (VŠB-TU) **T-FETI based scalable algorithms for contact problems**
O. Vlach (VŠB-TU) **Quasistatic contact problems**
T. Kozubek (VŠB-TU) **Scalable algorithms for dynamics contact problems**
V. Vondrák (VŠB-TU) **Efficient parallel contact shape optimization**
A. Markopoulos (VŠB-TU) **MATSOL - implementation methods**

3.12. 2010 from 9.00

J. Valdman (U Iceland) **Aposteriori error estimates (3)**
R. Blaheta et al. (I Geonics) **Computational (geo) micromechanics**
S. Sysala (I Geonics) **Elasto-plasticity: selected topics**
R. Blaheta et al. (I Geonics) **Identification of material parameters**

Lectures of the length of 30 or 45 minutes will be held in the **conference room of the Institute Geonics AS CR,** Studentská 1768, Ostrava Poruba.

Details: www.ugn.cas.cz. On behalf of the organizers: R. Blaheta, T. Kozubek.