

## WORKSHOP PROGRAMME

**8.30** Meeting at VSB – Technical University of Ostrava

**9.30** **Introduction and welcome**

**9.40** **Fictitious domain solvers for unilateral problems**

*Tomáš Kozubek, Department of Applied Mathematics, VSB – Technical University of Ostrava*

**10.05** **Cyclic plasticity modelling of steels using FEM**

*Radim Halama, Department of Mechanics of Materials, VSB – Technical University of Ostrava*

**10.30** Tea/Coffee break

**10.40** **Scalable BETI method for solving variational inequalities**

*Marie Sadowská, Department of Applied Mathematics, VSB – Technical University of Ostrava*

**11.05** **Frame optimization of asynchronous electromotor**

*Zdeněk Poruba, Department of Mechanics, VSB – Technical University of Ostrava*

**11.30** **FETI based algorithms for variational inequalities**

*David Horák, Department of Applied Mathematics, VSB – Technical University of Ostrava*

**11.55** Lunch break

**14.00** **Brief introduction of Imperial College London**

**14.15** **Inverse method for stiffness determination of impact damage in composite laminates**

*Pavel Sztefek, Department of Aeronautics, Imperial College London*

**14.40** **Fracture toughness measurement for the in-plane failure modes of laminated composites**

*Matthew Laffan, Department of Aeronautics, Imperial College London*

**15.05** Tea/Coffee break

**15.15** **Failure of 2D-woven composites**

*Nelson Vieira de Carvalho, Department of Aeronautics, Imperial College London*

**15.40** **Physical mechanisms associated with longitudinal compressive failure of composite materials by kink-band formation**

*Gutkin Renaud, Department of Aeronautics, Imperial College London*

**16.05** Close

**16.15** Informal discussion

**18.00** Dinner and social activity

## **PRESENTATIONS**

### **Fictitious domain solvers for unilateral problems**

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