11.-13. September 2019, Vienna, Austria

International Symposium on SPH and other particle-based continuum methods and their applications in geomechanics

ANALYSIS AND DESIGN IN CIVIL ENGINEERING is much dominated by the mesh-based numerical methods such as FEM. This dominance is being rivaled by the meshfree methods for problems with free surface flow, large deformation and discontinuous deformation. The first meshfree method is SPH (Smooth Particle Hydrodynamics). Last decades saw rapid development of numerous meshless methods, e.g. MPM (Material Particle Method), XFEM, PFEM (Particle Finite Element Method). Geomechanics with complex material behavior and problem setting offers an excellent playground for meshfree methods.

THIS WORKSHOP will bring together scientists, software developers and engineers to take stock of the state-of-the-art of meshfree methods, assess their potential for geomechanics problems and look into future development. Although the workshop focuses on SPH and other particle based continuum methods and their application in geomechanics, other innovative numerical methods and applications are equally welcome.

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COMMITTEE

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VENUE & ACCOMMODATION

The conference will be held at the university campus near our institute, which is close to the most beautiful park in Vienna, the Türkenschanzpark with a charm unique to Vienna. There are a number of quality hotels with fair price near our campus. We will negotiate good conditions for our participants. Vienna has an excellent network of public transport (subway, tram, bus).

PUBLICATIONS

We will bring out a special issue in ACTA GEOTECHNICA. Potential authors are encouraged to submit their papers to Acta Geotechnica. The submitted papers will be peer-reviewed. https://link.springer.com/journal/11440

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