11th International Conference on Computational Methods  
August 9th-12th 2020, at the Cloud

**Plenary Lectures**

Relation between blood pressure and pulse wave velocity for human arteries  
*Yonggang Huang, Northwestern University, United States*

Machine Learning based solutions of partial differential equations  
*Timon Rabczuk, Bauhaus Universität-Weimar, Germany*

Solving problems in structural dynamics using beam elements: From collapse behaviors of buildings to torque cancelling of robots  
*Daigoro Isobe, University of Tsukuba, Japan*  
*Hung Quoc Nguyen, Vietnamese German University, Vietnam*

**Semi Plenary Lectures**  
(ordered by last name)

Recent Advances in Evaluating Failure Evolution with the MPM  
*Zhen Chen, University of Missouri, United States*  
*Xu Guo, Dalian University of Technology, China*  
*Chanh Van Le, International University -VNU, HCM, Vietnam*

Progress in mixed models for efficient nonlinear analysis of composite shells. Application to optimal design of smart structures  
*Leonardo Leonetti, Università della Calabria, Italy*

Methodologies to compute fracture mechanics parameters (A revisit and some applications to large strain elastic-plastic problems)  
*Hiroshi Okada, Tokyo University of Science, Japan*

Direct simulation approach to high cycle fatigue life prediction based on extended space-time finite element method and machine learning  
*Dong Qian, University of Texas at Dallas, United States*

Symmetry and superposition rules proposed to apply in engineering design  
*Janusz Rebielak, Cracow University of Technology, Poland*

High-pressure gas bubble dynamics and its applications  
*Aman Zhang, Harbin Engineering University, China*

Topological insulating mechanics and generic design of metamaterials  
*Xiaoying Zhuang, Leibniz Universität Hannover, Germany*