



Seminar on Recent Progress in Crack Propagation Modeling of Concrete-like Materials

Program

Saturday March 19, 8:20-12:00

Co-chair: Chengbin Du

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|-----------------|---------------------------------------------------------------------------------------|
| 8:20 | Opening |
| 8:30 | Development of the cracking particle method for fracture |
| 9:00 discussion | Charles Augarde
<i>Durham University</i> |
| 9:10 | Three-dimensional cracking analysis of large arch dams based on |
| 9:40 discussion | unbalanced forces and energy minimization
Qiang Yang
<i>Tsinghua University</i> |

Tea Break(9:50~10:00)

Co-chair: Charles Augarde

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| 10:00 | Numerical Simulation of Extreme Deformation Problems |
| 10:30 discussion | Xiong Zhang
<i>Tsinghua University</i> |
| 10:40 | Study on hydraulic fracturing mechanism of concrete used in hydraulic |
| 11:10 discussion | structure engineering
Zongli Li
<i>Northwest A&F university</i> |
| 11:20 | Evaluation of stress intensity factors based on analytical independent |
| 11:50 discussion | cover
Haidong Su
<i>Changjiang River Scientific Research Institute of Water Resources
Commission</i> |

Saturday March 19, 13:30-17:40

Co-chair: Dan Huang

- 13:30 Reconstruction of internal structures for concrete composites and some
14:00 discussion novel numerical methods for crack propagation simulation
Chengbin Du
Hohai University
- 14:10 Discontinuous Galerkin configurational force fracture
14:40 discussion Will Coombs
Durham University
- 14:50 BEM/X-BEM for anisotropic materials in fracture mechanics
15:20 discussion Gabriel Hattori
Durham University

Tea Break(15:30~15:40)

Co-chair: Xiong Zhang

- 15:40 Several improvements and applications on XFEM
16:10 discussion Tiantang Yu
Hohai University
- 16:20 Modelling the propagation of multiple 3D hydraulic fractures using
16:50 discussion GFEM
Xuhai Tang
Wuhan University
- 17:00 Peridynamic model for concrete cracking
17:30 discussion Dan Huang
Hohai University