

Preliminary Program

Tuesday, October 8: Technical visit

Wednesday, October 9

9:00 - 9:15 Conference Opening

9:15-10:45 Session1: Smart Planning

Coffee break

11:15-12:45 Session 2: Smart Tunneling

Lunch

14:00-16:00 Session3: Smart Infrastructures

Coffee break

16:30 –18:30 Session 4: Resilient infrastructures I

19:30 – 23:00: Gala dinner

Thursday, October 10

8:30 - 10:30 Session 5: Smart Geotechnics I

Coffee break

11:00 - 12:30 Session 6: Smart Geotechnics II

Lunch

14:00 - 16:00 Session7: Smart Infrastructures - Water & Energy

Coffee break

16:30 - 18:30 Session 8: Resilient infrastructures II

Session1: Smart Planning

- Han ADMIRAAL “Urban integrated underground spaces” **(Invited lecture)**
- Monique LABBÉ “Underground space: at the crossroads of technical and social disciplines” **(Invited lecture)**
- Katia LAFFRECHINE “Urban underground spaces: functional and multidisciplinary approach” **(Invited lecture)**

Session 2: Smart Tunneling

- Xiongyao XIE “Smart Technology for Settlement Control Towards Zero Deformation Shield Tunneling” **(Invited lecture)**
- Didier SUBRIN “Tunneling-induced effects on neighboring structures: how to manage the risks within design and construction?” **(Invited lecture)**
- Jingfeng WANG “Progresses on intelligent construction and operation maintenance of urban under-lake tunnels” **(Invited lecture)**

Session3: Smart Infrastructures

- Sebastien STORMACQ « Smart Cities in the cloud” **(Invited lecture)**
- Reza TAHERZADEH “How to govern the main challenges in the conceptual design of a metro project” **(Invited lecture)**
- Xiaojun LI “Underground space development with digital and smart services” **(Invited lecture)**
- Federico Foria; Ricardo Ferraro; Gabriele Avancini; Esther Peticchia; Gabriele Miceli “ARCHITA: an innovative multidimensional mobile mapping system for tunnels and infrastructures”

Session 4: Resilient infrastructures I

- Geoffrey LEVERMORE “ More smart underground space and infrastructure to mitigate and adapt to climate change” **(Invited lecture)**
- Marwan Al HEIB "Pros and cons of smart valorisation and re-use of abandoned underground cavities" **(Invited lecture)**
- Haiping Yuan, Biaohua Le, Yubo Wang, Chenghao Chen, Hanbing Bian “Study on Risk Classification of Goaf Based on RS-SVM”
- Khalid El Ghazouli; Jamal El-Khatibi; Isam Shahrour; Aziz Soulhi “Comparison of M5 Model Tree and Nonlinear Autoregressive with eXogenous inputs (NARX) Neural Network for urban stormwater discharge modelling”

Session 5: Smart Geotechnics I

- Guobo Wang, Jiaohao Mu, Yanbin Fu “Seismic response study of adjacent space curved tunnel group
- Hui Lee; Wei-zhong Chen; Xian-jun Tan; Qiao-chu Yang; Xiao-gang Wang “Investigation of rock bolting for tunnels based on an efficient CATIA-ABAQUS model”
- Nguyen Thu Huyen “Stabilisation and erosion control on slopes”
- Weizhong Chen; Luyu Wang; Xuyan Tan; Jiang Lei “An integrated approach for jointed rock slope stability analysis using stochastic discrete fractures: A case study in mountainous area”

Session 6: Smart Geotechnics II

- Yanbin Fu, Jia Yuan, Junsheng Wen “Numerical analysis on cone penetration test in sand using smoothed particle hydrodynamics method”
- Zohra Boutaraa “Effect of the geotextiles reinforcement area on the stabilization of soil deformations in Chlef city (Algeria)”
- "Huayan Yao and Jingfeng Wang “Disturbance effect analysis of pipe jacking construction based on failure approach index”
- Hicham Alhajj Chehade; Marwan Sadek; Daniel Dias; Fadi Hage Chehade “Optimization of sensors locations in internal stability analysis of Geosynthetic-reinforced earth retaining walls”

Session7: Smart Infrastructures - Water & Energy

- Fadi Chaaban; Hanan Darwishe; Jamal El-Khatabi “A Semi-Automatic Approach in GIS for 3D Modeling and Visualization of Utility Networks: Application for Sewer & Rain Networks”
- Makram Abdellatif; Julien Chamoin; Didier Defer “A thermal control methodology based on a predictive model for indoor heating management”
- Pavel Vitliemov, Daniel Bratanov, Milko Marinov “An approach to design a distributed knowledge-based platform for energy efficient cities”
- Abdallah AL Naemi & Isam Shahrour “Transformation of the water system of the Education City in Doha into a smart water system”
- Elias Farah; Amani Abdallah; Isam Shahrour “Prediction of water consumption using Artificial Neural Networks modelling (ANN)”
- Hichem Yakoub Khemmal; Azzedine Hani “Standardized system for evaluating groundwater pollution”

Session 8: Resilient infrastructures II

- Isam Shahrour "Use of the smart city concept for underground space resiliency"
(Invited lecture)
- Samah Jabari, Isam Shahrour, Jamal El-Khatabi “Use of Risk Analysis for Water Security Assessment”
- Ahmed Kaddioui, Isam Shahrour, Ahmed El Oirrak “Uses of Augmented reality for urban utilities management”
- Rania Wehbe, Isam Shahrour “Use of BIM and Smart Monitoring for buildings' Indoor Comfort Control”
- Hanbing Bian “Smart monitoring system for risk management in the underground space”
- Azzedine Hani “An Effective Approach for Land Use Management in the Palestinian territories”