

## C. Fidelibus List of Papers

### In International Journals

1. **Piana F, Barale L, Botta S, Compagnoni R, Fidelibus C, Tallone S, Avataneo C, Cossio R, Turci F** (2020). Direct and indirect assessment of the amount of naturally occurring asbestos in fractured rocks. *Boletín Geológico y Minero* **131**:in press
2. **Delle Rose M, Martano P, Fidelibus C** (2020). The recent floods in the asso torrent basin (Apulia, Italy): an investigation to improve the stormwater management. *Water* **12**:661
3. **Barale L, Botta S, Piana F, Tallone S, Fidelibus C, Avataneo C, Turci F, Compagnoni R, Cossio R, Alberto W** (2020). Estimation of natural asbestos content in rocks by fracture network modeling and petrographic characterization. *Engineering Geology* **271**:105566
4. **Wang B, Feng Y, Pieraccini S, Scialó S, Fidelibus C** (2019). Iterative coupling algorithms for large multi-domain problems with the Boundary Element Method. *International Journal for Numerical Methods in Engineering* **117**(1):1–14
5. **Apollonio C, Delle Rose M, Fidelibus C, Orlanducci L, Spasiano D** (2018). Water management problems in a karst flood-prone endorheic basin. *Environmental Earth Sciences* **676**:77
6. **Berrone S, Borio A, Fidelibus C, Pieraccini S, Scialó S, Vicini F** (2018a). Advanced computation of steady-state fluid flow in discrete fracture-matrix models: FEM-BEM and VEM-VEM fracture-block coupling. *International Journal on Geomathematics* **9**(2):377–399
7. **Berrone S, Fidelibus C, Pieraccini S, Scialó S, Vicini F** (2018b). Unsteady advection-diffusion simulations in complex discrete fracture networks with an optimization approach. *Journal of Hydrology* **566**:332–345
8. **Delle Rose M, Fidelibus C, Martano P** (2018). Assessment of specific yield in karstified fractured rock through the water-budget method. *Geosciences* **8**(34)
9. **Xu C, Fidelibus C, Dowd P, Wang Z, Tian Z** (2018). An iterative procedure for the simulation of the steady-state fluid flow in rock fracture networks. *Engineering Geology* **242**:160–168
10. **Repetto L, Fidelibus C** (2017). Decision plots for preliminary design of single-shield TBMs. *Engineering Geology* **216**:134–139
11. **Yong S, Löw S, Schuster K, Nussbaum C, Fidelibus C** (2017). Characterisation of excavation-induced damage around a short test tunnel in the Opalinus Clay. *Rock Mechanics and Rock Engineering* **50**:1959–1985
12. **Delle Rose M, Fidelibus C** (2016). Water resource management in karstic catchments: the case of the Asso Torrent basin (Southern Italy). *Environmental Earth Sciences* **75**(892)
13. **Internò G, Lenti V, Fidelibus C** (2015). Laboratory experiments on diffusion and sorption of heavy metals in a marine clay. *Environmental Earth Sciences* **73**:4443–4449

14. **Berrone S, Fidelibus C, Pieraccini S, Scialó S** (2014). Simulation of the steady-state flow in discrete fracture networks with non-conforming meshes and extended finite elements. *Rock Mechanics and Rock Engineering* **47**:2171–2182
15. **Iabichino G, Barbero M, Cravero M, Fidelibus C, Usai G** (2014). Experimental tests for the assessment of the shear strength of marble waste dumps. *Environmental Earth Sciences* **71**:3259–3271
16. **Barpi F, Valente S, Cravero M, Iabichino G, Fidelibus C** (2012). Fracture mechanics characterization of an anisotropic geomaterial. *Engineering Fracture Mechanics* **84**:111–122
17. **Federico A, Popescu M, Elia G, Fidelibus C, Internò G, Murianni A** (2012). Prediction of time to slope failure: a general framework. *Environmental Earth Sciences* **66**:245–256
18. **Fidelibus C, Lenti V** (2012). The propagation of grout in pipe networks. *Computers and Geosciences* **45**:331–336
19. **Valente S, Fidelibus C, Löw S, Cravero M, Iabichino G, Barpi F** (2012). Analysis of fracture mechanics tests on Opalinus Clay. *Rock Mechanics and Rock Engineering* **45**:767–779
20. **Fidelibus C, Cammarata G, Cravero M** (2009). Hydraulic characterization of fractured rocks. In: M Abbie, J Bedford, eds., *Rock Mechanics: New Research*. Nova Science Publishers
21. **Cammarata G, Fidelibus C, Cravero M, Barla G** (2007). The hydromechanically coupled response of rock fractures. *Rock Mechanics and Rock Engineering* **40**:41–61
22. **Fidelibus C** (2007). The 2d hydro-mechanically coupled response of a rock mass with fractures via a mixed BEM-FEM technique. *International Journal for Numerical and Analytical Methods in Geomechanics* **31**:1329–1348
23. **Delle Rose M, Fidelibus C, Internó G, Parise M** (2003). The experience of Southern Apulia (Italy) coastal karst aquifer: indications for the management. *WIT Transactions on Ecology and the Environment* **67**
24. **Lenti V, Fidelibus C** (2003). A BEM solution of steady-state flow problems in discrete fracture networks with minimization of core storage. *Computers and Geosciences* **29**:1183–1190
25. **Barla G, Cravero M, Fidelibus C** (2000). Comparing methods for the determination of the hydrological parameters of a 2D equivalent porous medium. *International Journal of Rock Mechanics and Mining Sciences* **37**:1133–1141
26. **Delle Rose M, Federico A, Fidelibus C** (2000). A computer simulation of groundwater salinization risk in Salento peninsula. *WIT Transactions on Ecology and the Environment* **45**
27. **Cravero M, Fidelibus C** (1999). A code for scaled flow simulations on generated fracture networks. *Computers and Geosciences* **25**:191–95
28. **Dershowitz W, Fidelibus C** (1999). Derivation of equivalent pipe network analogues for 3D discrete fracture networks by the boundary element method. *Water Resources Research* **35**:2685–2691

29. **Dershowitz W, Fidelibus C** (1998). Boundary element method calculation of pipe features for a fracture network. *WIT Transactions on Modelling and Simulation* **20**
30. **Fidelibus C, Barla G, Cravero M** (1997). A mixed solution for two-dimensional unsteady flow in fractured porous media. *International Journal for Numerical and Analytical Methods in Geomechanics* **21**:619–633
31. **Fidelibus C, Lenti V** (1996). A BEM code for ground water problems in multizoned domains with normal boundary flux discontinuities. *Groundwater* **34**:943–998

## Proceedings of International Conferences

(selected)

1. **Xu C, Fidelibus C, Wang Z, Dowd PA** (2018). A simplified equivalent pipe network approach to model flow in poro-fractured rock masses. *2nd International Discrete Fracture Network Engineering Conference*, Seattle US-WA
2. **Xu C, Fidelibus C, Dowd PA, Leonard M** (2016). An improved pipe network model for simulation of fluid flow through discrete fracture networks. *IC3G 2016 International Conference on Geo-Mechanics, Geo-Energy and Geo-Resources*, Melbourne AU
3. **Benedetto M, Berrone S, Pieraccini S, Scialò S, Vicini F, Fidelibus C** (2014). A family of methods with arbitrary meshes for DFN flow simulations. *1st International Discrete Fracture Network Engineering Conference*, Vancouver CA
4. **Xu C, Fidelibus C, Dowd PA** (2014). Realistic pipe models for flow modelling in discrete fracture networks. *1st International Discrete Fracture Network Engineering Conference*, Vancouver CA
5. **Cammarata G, Campi S, Fidelibus C, Marengo A** (2011). Evaluation of risks in CO<sub>2</sub> deep geological storage via a stochastic method. *Offshore Mediterranean Conference 2011*, Ravenna IT
6. **Floria V, Repetto L, Russo G, Fidelibus C** (2009). Scoping calculations of TBM advancement in flysch and breccias of Strait-of-Gibraltar Tunnel. *EUROTUN 2009*, Bochum DE
7. **Floria V, Fidelibus C, Repetto L, Russo G** (2008). Drainage and relative increase of short term strength of low permeability rock mass. *AFTES International Congress*, Monaco MC
8. **Floria V, Lombardo C, Russo G, Fidelibus C** (2008). Volume controlled grouting for compensation of drainage-induced settlements. *ITA-AITES World Tunnel Congress*, Agra IN
9. **Yong S, Kaiser PK, Löw S, Fidelibus C** (2008). The role of heterogeneity on the development of excavation-induced fractures in the Opalinus Clay. *GeoEdmonton'08*, Edmonton CA
10. **Yong S, Löw S, Fidelibus C** (2008). Characterizing excavation-induced perturbations around a short tunnel in an overconsolidated clay shale. *42nd US Rock Mechanics Symposium*, San Francisco US-CA
11. **Yong S, Löw S, Fidelibus C, Lemy E, Frank E** (2007). Disturbance in the EDZ in the Opalinus Clay at Mont Terri. *International Meeting on Clays in Natural and Engineered Barriers for Radioactive Waste Confinement*, Lille FR

12. **Yong S, Löw S, Fidelibus C, Frank E, Lemy F, Schuster K** (2006). Induced fracturing in the Opalinus Clay: An integrated field experiment. *4<sup>th</sup> Asian Rock Mechanics Symposium*, Singapore SG
13. **Cammarata G, Barla G, Cravero M, Fidelibus C** (2005). A numerical technique for the prediction of the coupled hydro-mechanical response of rock fractures. *11<sup>th</sup> IACMAG Conference*, Torino IT
14. **Federico A, Popescu M, Fidelibus C, Internò G** (2004). On the prediction of the time of occurrence of a slope failure: a review. *9th International Symposium on Landslides*, Rio de Janeiro BR
15. **Federico A, Fidelibus C, Internò G** (2002). The prediction of landslide time to failure - A state of the art. *3rd International Conference on Landslides, Slope Stability and the Safety of Infrastructures*, Singapore SG
16. **Barla G, Barla M, Cravero M, Fidelibus C** (2001). Development and applications of discontinuum modelling to rock engineering. *10<sup>th</sup> IACMAG Conference*, Tucson US-AZ
17. **Fidelibus C, Barla G, Cravero M** (1996). Alternative schemes for the assessment of the equivalent continuum hydraulic properties of rock masses. *EUROCK96*, Torino IT
18. **Spilotro G, Fidelibus C, Lenti V** (1992). A model for evaluating progressive failure in earth slopes. *6<sup>th</sup> International Symposium on Landslides*, Christchurch, NZ
19. **Spilotro G, Lenti V, Fidelibus C** (1990). The role of calcareous cementation on bearing capacity of driven piles. *6<sup>th</sup> International Congress of the International Association of Engineering Geology*, Amsterdam NL