



flowpath

National Meeting
on Hydrogeology

2019

CONGRESS PROGRAM

Milano, June 12 - 14, 2019

Congress Program

Wednesday, June 12th, 2019

8:00-8:45	Registration
8:45-9:00	Opening Session
GROUNDWATER RESOURCE MANAGEMENT	
09:00-09:30	Keynote lecture
09:30-10:30	4 Oral presentations
10:30-11:00	<i>Poster coffee break</i>
11:00-12:30	6 Oral presentations
12:30-13:00	Poster session
13:00-14:15	<i>Lunch</i>
CONTAMINATED SITES	
14:15-14:45	Keynote lecture
14:45-16:00	5 Oral presentations
16:00-16:30	<i>Poster coffee break</i>
16:30-18:00	6 Oral presentations
18:00-18:30	Poster Session
18:30-19:15	IAH Italian Chapter General Assembly
20:45	Conference dinner at Cascina Cuccagna, Via Cuccagna 2, Milano During the dinner, the 4th Zuppi prize for the best PhD thesis on hydrogeological subjects issues will be awarded

Thursday, June 13th, 2019

8:00-9:00	Registration
FRACTURED ROCKS AND KARSTIC SYSTEMS	
09:00-09:30	Keynote lecture
09:30-10:30	4 Oral presentations
10:30-11:00	<i>Poster coffee break</i>
11:00-12:30	6 Oral presentations
12:30-13:00	Poster session
13:15-14:30	<i>Lunch</i>
URBAN HYDROGEOLOGY	
14:00-14:30	Keynote lecture
14:30-16:00	6 Oral presentations
16:00-16:30	<i>Poster coffee break</i>
16:30-17:30	4 Oral presentations
17:30-18:00	Poster session
18:00-19:00	ECHN Discussion Panel. Get to the point – Experiences and perspective on hydrogeological modelling: the point of view of modelers and users
19:00	Best Poster Presentation Award

Friday, June 14th, 2019

8:45	Meeting at Darsena, Alzaia Naviglio Grande 4
09:00-16:00	Field Trip
17:30	Expected arrival at Malpensa Airport and Milano Central Railway Station

Scientific Program

Wednesday, June 12th

GROUNDWATER RESOURCE MANAGEMENT (session supported by the ENeRAG H2020 Project)	
<i>Conveners: Prof. G. P. Beretta (Università degli Studi di Milano), Ing. Giovanni Formentin (Tethys S.r.l.), Dr. M. Rotiroti (Università degli Studi di Milano-Bicocca)</i>	
9:00 - 9:30	KEYNOTE LECTURE: The management of groundwater resources in the Maltese Islands <i>Dr. Manuel Sapiano - Malta's Energy and Water Agency</i>
9:30 - 9:45	The role of the Norcia Plain aquifer in the groundwater flow of the Sibillini Mts. hydrostructure: a preliminary numerical model based on the effects of 2016 seismic sequence <i>Francesca Banzato, Alessandro Lacchini, Lucia Mastroiello, Stefania Passaretti, Chiara Sbarbati, Daniela Valigi, Sara Veroli, Marco Petitta</i>
9:45 - 10:00	Promoting water resource management through the use of ICT tools and participatory approach <i>Giovanna De Filippis, Iacopo Borsi, Laura Foglia, Massimiliano Cannata, Rotman Criollo, Enric Vázquez-Suné, Irena Kopač, Björn Panteleit, Pio Positano, Marco Saulo Nannucci, Manuel Sapiano, Daria Svidzinska, Mykhailo Grodzynskyi, Rudy Rossetto</i>
10:00 - 10:15	Use of piezometric time series for the identification of groundwater hydrodynamic behaviours and controlling factors: the case study of the Piedmont plain (Italy) <i>Manuela Lasagna, Susanna Mancini, Domenico Antonio De Luca</i>
10:15 - 10:30	Impact of environmental, hydraulic and construction parameters on nitrate removal rate and nitrous oxide release of denitrification walls in a subtropical climate <i>Fabio Manca, Daniele De Rosa, Lucy Reading, David Rowlings, Clemens Scheer, Peter Grace</i>
10:30 - 11:00	POSTER COFFEE BREAK
11:00 - 11:15	Stochastic analysis of hydraulic head's series for optimizing monitoring networks: application to the Bacchiglione Basin <i>Mara Meggiorin, Giulia Passadore, Silvia Bertoldo, Andrea Sottani, Andrea Rinaldo</i>
11:15 - 11:30	Multi-Technique groundwater flow system analysis and dating of a deep aquifer in Alessandria Basin (Piedmont) <i>Nicola Quaranta, Elena Cogo, Adriano Simoni, Elisa Sacchi, Mariachiara Caschetto, Massimo Marchesi</i>
11:30 - 11:45	Groundwater Modelling in Support of Water Resources Public Management within the Metropolitan area of Milan <i>Chiara Righetti, Desdemona Oliva, Maurizio Gorla, Luca Alberti, Agata Angela Cristaldi</i>

11:45 - 12:00	Water Management in Limpopo National Park Area <i>Giuseppe Sappa, Maurizio Barbieri, Stefania Vitale</i>
12:00 - 12:15	Groundwater and surface water quality characterization with positive matrix factorization <i>Chiara Zanotti, Tullia Bonomi, Letizia Fumagalli, Marco Rotiroti, Gennaro Alberto Stefania, Sara Taviani, Marco Faggioli, Valentina Soler, Martina Patelli, Veronica Nava, Davide Sartirana, Giulia Stefenelli, Francesco Canonaco, Andre S.H. Prévôt, Barbara Leoni</i>
12:15 - 12:30	Hydrogeological characterisation of the Flumendosa plain <i>Claudio Arras, Roberto Balia, Paolo Botti, Cristina Buttau, Pierluigi Cau, Stefania Da Pelo, Antonio Funedda, Giorgio Ghiglieri, Alfredo Loi, Mario Lorrari, Maria Teresa Melis, Maurizio Testa</i>
12:30 - 13:00	POSTER SESSION

CONTAMINATED SITES

Conveners: Prof. D. De Luca (Università degli Studi di Torino), Dr. M. Pellegrini (Syndial S.p.A.), Dr. I. La Licata (Politecnico di Milano)

14:15 - 14:45	KEYNOTE LECTURE: Modelling contaminant transport in geological media: challenges and perspectives <i>Dr. Marco Bianchi - British Geological Survey</i>
14:45 - 15:00	The 'Polluter Pays Principle': a multidisciplinary approach under legal and technical perspectives <i>Dario Covucci</i>
15:00 - 15:15	TRA-KD: an improved tool for particle tracking simulation based on the Kolmogorov-Dmitriev theory <i>Alessandro Comunian, Gianluca Cannizzaro, Francesca Giacobbo, Mauro Giudici</i>
15:15 - 15:30	A methodological approach for the identification of sulphate sources in the Portoscuso area (south-western Sardinia) <i>Stefania Da Pelo, Chiara Porru, Riccardo Biddau, Rosa Cidu, Carla Ardau, Cristina Buttau, Franco Frau, Maria Filippini, Gianfranco Mulas</i>
15:30 - 15:45	A three-dimensional multicomponent reactive transport model to assess the role of subsurface heterogeneity on arsenic mobility in the shallow aquifer of the Venetian Alluvial Plain <i>Nico Dalla Libera, Paolo Fabbri, Daniele Pedretti, Leonardo Mason, Leonardo Piccinini, Fabio Tateo</i>



15:45 - 16:00	The landfill leachate impact on groundwater hydrogeochemistry in fine deposits: a multidisciplinary study <i>Diego Di Curzio, Sergio Rusi</i>
16:00 - 16:30	POSTER COFFEE BREAK
16:30 - 16:45	Evaluation of the performance of a hydraulic barrier by a Monte Carlo method <i>Giovanni Formentin, Mariangela Vitiello, Alberto Francioli, Jacopo Terrenghi</i>
16:45 - 17:00	3D case-studies of VOC contaminated sites in the city of The Hague, The Netherlands <i>Willem Havermans, Michiel Pluim</i>
17:00 - 17:15	Evaluation of the large-scale permeability of the substrate of a physically contained area and development of a system for the dynamic management of hydraulic gradients to neutralize contaminant diffusive flux <i>Elena Leale, Christine Ballarin, Emanuele Candiani, Andrea Moroni, Giovanni Russo, Mario Manassero, Sara Puma</i>
17:15 - 17:30	Full-scale application of EHC® Liquid technology for the ISCR and ERD treatment of an aquifer contaminated with Tetrachloromethane and Chloroform <i>Alberto Leombruni, Patrizia Trefiletti, Mauro Consonni, Linda Collina, Matteo Avogadri, Aldo Trezzi, Caterina Di Carlo</i>
17:30 - 17:45	Numerical simulation of Groundwater Circulation Wells: a stochastic approach to evaluate their effectiveness <i>Francesca Lotti, Alessandro Battaglia, Luca Ferioli, Marco Petrangeli Papini, Vincenzo Piscopo</i>
17:45 - 18:00	Multi-isotopic approach for the groundwater flow and contaminants characterization in a complex contaminated site: Ex-ACNA di Cengio (SV) <i>Michele Pellegrini, Massimo Marchesi, Luca Alberti</i>
18:00 - 18:30	POSTER SESSION

12:30 - 13:00	GROUNDWATER RESOURCE MANAGEMENT
	POSTER SESSION
GRM11	Inferring different hydrogeochemical processes in a coastal aquifer via factor analysis <i>Gianluigi Busico, Nerantzis Kazakis, Emilio Cuoco, Nicolò Colombani, Dario Tedesco, Micòl Mastrocicco</i>
GRM12	Geological criteria to the 3D delimitation of groundwater bodies (GWB) in the hydrographic district of Sardinia <i>Claudio Arras, Roberto Balia, Paolo Botti, Cristina Buttau, Pierluigi Cau, Stefania Da Pelo, Antonio Funedda, Giorgio Ghiglieri, Alfredo Loi, Mario Lorrai, Maria Teresa Melis, Maurizio Testa</i>
GRM13	The ENeRAG project: towards a dynamic system approach for geofluids <i>Corrado Camera, Daniele Pedretti, Ferenc Mòlnar, Teppo Arola, Timea Havril, Anita Eröss, Marco Masetti, Juha Kaija, Judit Mádl-Szönyi</i>
GRM14	Depth profiles of H₂O, C, N and S stable isotopes in a shallow aquifer-aquitard below agricultural fields reveal large hydrochemical heterogeneities in contrasting soils <i>Nicolò Colombani, Ramon Aravena, Giuseppe Castaldelli, Micòl Mastrocicco</i>
GRM15	Hydrogeochemistry and natural background levels for the groundwater body of Sele river plain (southern Italy) <i>Alfonso Corniello, Daniela Ducci, Mariangela Sellerino, Elena Del Gaudio</i>
GRM16	Evaluating conjunctive use of ground- and surface-water and crop yield in rural environments by means of simulation tools <i>Giovanna De Filippis, Federico Triana, Matteo Ghetta, Iacopo Borsi, Wolfgang Schmid, Rudy Rossetto</i>
GRM17	The VISTA Project: a test site to investigate the impact of traditional and precision irrigation on groundwater (San Gemini basin, Central Italy) <i>Lucio Di Matteo, Stefano Casadei, Francesco Peppoloni, Francesco De Giorgi</i>
GRM18	Methods for the analysis of piezometric level evolution in time as response of climate change: current trends and resource status in Piedmont plain (NW Italy) <i>Susanna Mancini, Manuela Lasagna, Domenico Antonio De Luca</i>
GRM19	Estimating the effect of the Desert-Adapt measures on porewater availability for ten agricultural sites in Europe <i>Luigi Alessandrino, Eleonora Grilli, Simona Castaldi, Micòl Mastrocicco</i>
GRM20	Stochastic analysis of temperatures' time series for characterizing a fluvial work efficiency on a regional Managed Aquifer Recharge pilot site <i>Mara Meggiorin, Giulia Passadore, Silvia Bertoldo, Andrea Sottani, Andrea Rinaldo</i>

GRM21	Hydrogeological conceptual model of loess deposits: a case study from eastern Croatia <i>Marco Pola, Ivica Pavičić, Staša Borović, Teuta Vranješ, Lidija Galović, Lara Wach, Vedran Rubinić, Kosta Urumović</i>
GRM22	Hydrological behaviour of a complex landslide: a case study in the Northern Apennines (Italy) <i>Melinda Raimondo, Alessandro Chelli, Fulvio Celico, Emma Petrella</i>
GRM23	Managed Aquifer Recharge as a solution to cope with water scarcity: the LIFE REWAT Suvereto infiltration basin <i>Rudy Rossetto, Giovanna De Filippis, Simone Maria Piacentini, Marta Lazzaroni, Simone Neri, Davide Continanza, Mirko Brilli, Patrizio Lainà, Marco Masi, Alessandra Pei, Valentina Menonna, Federico Lazzaroni, Alessandro Fabbri</i>

18:00 - 18:30	CONTAMINATED SITES
	POSTER SESSION
CS12	Methodological approach for the assessment of groundwater contamination by transition metals leached through waste rock dumps: the C.na Pecorara muck dump site case study (HV/HC “Terzo Valico” project) <i>Alessandro Baietto, Paolo Perello, Alberto Scuderi, Luigi Marini</i>
CS13	Anaerobic and aerobic bioremediation of chlorinated solvents and hydrocarbons plumes from an old landfill in the Venice lagoon environment <i>Giovanni Pietro Beretta, Lucia Cavalca, Martina Bertolini, Sarah Zecchin, Giovanni Buscone, Laura Ledda, Laura Ferrari, Giacinto Carnevale, Gerardo Bozzetto, Jacopo Terrenghi</i>
CS14	In situ containment of PFAS in groundwater using Colloidal Activated Carbon <i>Marcello Carboni, Paola Gorla</i>
CS15	Groundwater remediation technologies on petroleum hydrocarbons contaminated sites in Italy: a multi-disciplinary statistical analysis <i>Mara Dal Santo, Giuseppe Alberto Prosperi</i>
CS16	Chemical reagents applications as innovative remediation technologies for petroleum hydrocarbon impacted groundwater in Italy <i>Mara Dal Santo, Giuseppe Alberto Prosperi</i>
CS17	Multiphase flow and solute transport modelling of a hypothetical methane leakage into a shallow aquifer <i>Andrea D’Aniello, Massimiliano Fabbicino, Daniela Ducci, Domenico Pianese</i>

CS18	Testing phytoscreening in a shallow aquifer contaminated by chlorinated ethenes <i>Carlotta Leoncini, Maria Filippini, Adele Lo Monaco, Simona Gagni, Renata Emiliani, Roberto Riberti, Francesco Caridei, Alessandro Gargini</i>
CS19	Hydrogeological data from contaminated sites. Millions of numbers without soul <i>Francesca Lotti</i>
CS20	Compositional fingerprinting tools for hydrocarbon contaminated site characterization: source apportionment and spill dating applications at two field case studies <i>Massimo Marchesi, Patrizia Trefiletti, Alberto Francioli, Rodolfo Ferrari, Roberto Ferrari</i>
CS21	An interdisciplinary approach to evaluate the Natural Attenuation as potential remediation action <i>Pietro Rizzo, Emma Petrella, Anna Maria Sanangelantoni, Marco Ghirardi, Fulvio Celico, Maria Giovanna Tanda, Andrea Zanini</i>
CS22	Assessment of soil buffer capacity on nutrients and emerging contaminants at two blue infrastructures for the provision of water-related agroecosystem services <i>Alessio Barbagli, Benjamin Niklas Jensen, Muhammad Raza, Christoph Schüth, Rudy Rossetto</i>
CS23	Integrated use of biodegradable surfactants and ISCO reagents for the treatment of hydrocarbon contaminated soils and aquifers <i>Claudio Sandrone, Andrea Campi, Giulia Spini, Fabiano Maccari</i>
CS24	Innovative tools for the analysis of biological processes for the remediation of contaminated aquifers <i>Claudio Sandrone, Andrea Campi, Giulia Spini</i>
CS25	Hydrogeological characterization of a closed MSW landfill using multivariate statistical analysis and groundwater numerical modelling <i>Gennaro Alberto Stefania, Tullia Bonomi, Chiara Zanotti, Marco Rotiroti, Davide Sartirana, Giuseppe Raffaello Di Martino, Antonella Perosa, Piergiorgio Valentini, Letizia Fumagalli</i>

Thursday, June 13th

FRACTURED ROCKS AND KARSTIC SYSTEMS

Conveners: Prof. F. Fiorillo (Università degli Studi del Sannio), Dr. F. Lotti (Kataclima S.r.l.),
Dr. L. E. Zuffianò (CNR-IRPI Bari)

9:00 - 9:30	KEYNOTE LECTURE: Methodological approach for investigation in Karst Hydrogeology <i>Prof. Andreo-Navarro Bartolomé - University of Malaga</i>
9:30 - 9:45	Hydrogeochemical monitoring of natural waters from Central Apennines, Italy: multiparametric acquisition and processing to identify possible seismic precursors <i>Marino Domenico Barberio, Francesca Banzato, Alessandro Lacchini, Valentina Marinelli, Marco Petitta, Chiara Sbarbati</i>
9:45 - 10:00	Nossana Karst Spring Behaviour under future Climate Change Scenarios <i>Andrea Citrini, Corrado Camera, Giovanni Pietro Beretta, Jacopo Terrenghi</i>
10:00 - 10:15	A simple graphical method to visualize the end-member fractions in a three-component groundwater mixing: the example of Ferrarelle system (Riardo, southern Italy) <i>Emilio Cuoco, Stefano Viaroli, Vittorio Paolucci, Lucia Mastrorillo, Roberto Mazza, Dario Tedesco</i>
10:15 - 10:30	Results of a research regarding springs which follow the hyperbolic recession function with $n < 1$ <i>Walter Dragoni, Simone Maria Piacentini, Vincenzo Piscopo</i>
10:30 - 11:00	POSTER COFFEE BREAK
11:00 - 11:15	Long-term hydrogeological impacts of the "Firenzuola" high-speed railway tunnel (northern Apennines) <i>Maria Filippini, Piero Civollani, Giovanni Mazzei, Enrico Dinelli, Alessandro Gargini</i>
11:15 - 11:30	Process-based resource vulnerability assessment on the example of Gömör-Torna Karst, Hungary and Slovakia <i>Veronika Iván, Judit Mádl-Szőnyi</i>
11:30 - 11:45	Hydrogeological models of potential sites for a deep geological repository in the Czech Republic as part of the site selection process <i>Marek Vencl, Ondrej Mikláš</i>
11:45 - 12:00	The upwelling groundwater flow in the karst area of Grassano-Telese springs (southern Italy) <i>Francesco Fiorillo, Guido Leone, Mauro Pagnozzi, Vittorio Catani, Giovanni Testa, Libera Esposito</i>

12:00 - 12:15	A detailed geological reconstruction as a tool for the reliable numerical model implementation: The Euganean Geothermal System case study (NE Italy) <i>Filippo Torresan, Leonardo Piccinini, Paolo Fabbri, Marco Pola, Mauro Cacace, Dario Zampieri</i>
12:15 - 12:30	Karst connectivity identification: combining a long-lasting cross-hole hydraulic test and the stochastic inversion for large-scale aquifer characterization <i>Michela Trabucchi, Daniel Fernández-Garcia, Jesús Carrera, Xavier Sanchez-Vila, Alvaro Hernandez Corrado Torre</i>
12:30 - 13:00	POSTER SESSION

URBAN HYDROGEOLOGY

Conveners: Dr. R. Rossetto (Scuola Sup. Universitaria Sant'Anna Pisa), Dr. M. Marchesi (IT2Europe), Dr. S. Stevenazzi (Università degli Studi di Milano)

14:00 - 14:30	KEYNOTE LECTURE: How models surprise <i>Dr. Daniel Feinstein - United States Geological Survey</i>
14:30 - 14:45	Hydrogeological setting of a Rome city sector: shallow groundwater in the right bank of Tiber River inside the G.R.A highway <i>Adele Clausi, Roberto Mazza, Francesco La Vigna, Isidoro Bonfà</i>
14:45 - 15:00	Nullspace Monte Carlo particle tracking to identify source areas of groundwater pollution in the N-W Milano FUA (AMIIGA Project-CE No 32) <i>Luca Alberti, Loris Colombo, Giovanni Formentin, Pietro Mazzon</i>
15:00 - 15:15	Preserving archaeological heritages from flood hazard: use of 3D geological models as a base for conceptual hydrogeological scheme in the area of the Coliseum (Rome) <i>Cristina Di Salvo, Marco Mancini, Massimiliano Moscatelli, Francesco Stigliano, Maurizio Simionato, Gian Paolo Cavinato</i>
15:15 - 15:30	Assessing aquifer vulnerability to seawater intrusion accounting for surface water bodies <i>Nerantzis Kazakis, Gianluigi Busico, Nicolò Colombani, Kostantinos Voudouris, Micòl Mastrocicco</i>
15:30 - 15:45	Monitoring the effectiveness of the hydraulic barrier from Castelluccio (Tuscany central Italy). A shallow aquifer with a marked anthropogenic boron contamination <i>Marta Lazzaroni, Orlando Vaselli, Luca Rossato, Luciano Giannini, Barbara Nisi, Stefania Venturi</i>

15:45 - 16:00	A Bayesian approach for the assessment of shallow and deep aquifers susceptibility to point sources contamination in the Province of Milan, Italy <i><u>Licia C. Pollicino</u>, Marco Masetti, Stefania Stevenazzi, Maurizio Gorla, Agata Cristaldi, Chiara Righetti</i>
16:00 - 16:30	POSTER COFFEE BREAK
16:30 - 16:45	Hydrothermal management of an ATES system in Wallonia, Belgium <i>Guillaume De Schepper, <u>Marco Riboni</u>, Tanguy Robert</i>
16:45 - 17:00	Modelling the interactions between groundwater and the underground infrastructures using MODFLOW-USG and ArcGIS Pro: the case study of Milan metropolitan city <i><u>Davide Sartirana</u>, Gennaro Alberto Stefania, Mattia De Amicis, Tullia Bonomi</i>
17:00 - 17:15	Follow-up investigation on groundwater flowpath at regional scale using a multi-isotopic approach: the case study of Lombardy region <i><u>Maurizio Gorla</u>, Agata Cristaldi, Alessandro Lacchini, Davide Lo Monaco, Valentina Marinelli, Simona Pascariello, Chiara Righetti, Chiara Sbarbati, Roberto Simonetti, Marco Petitta, Ramon Aravena</i>
17:15 - 17:30	Atmospheric nitrogen deposition in a highly human impacted area in northern Italy <i><u>Stefania Stevenazzi</u>, Marco Masetti, Corrado Camera, Massimo Tiepolo, Elena S. Ferrari, Roberto S. Azzoni</i>
17:30 - 18:00	POSTER SESSION

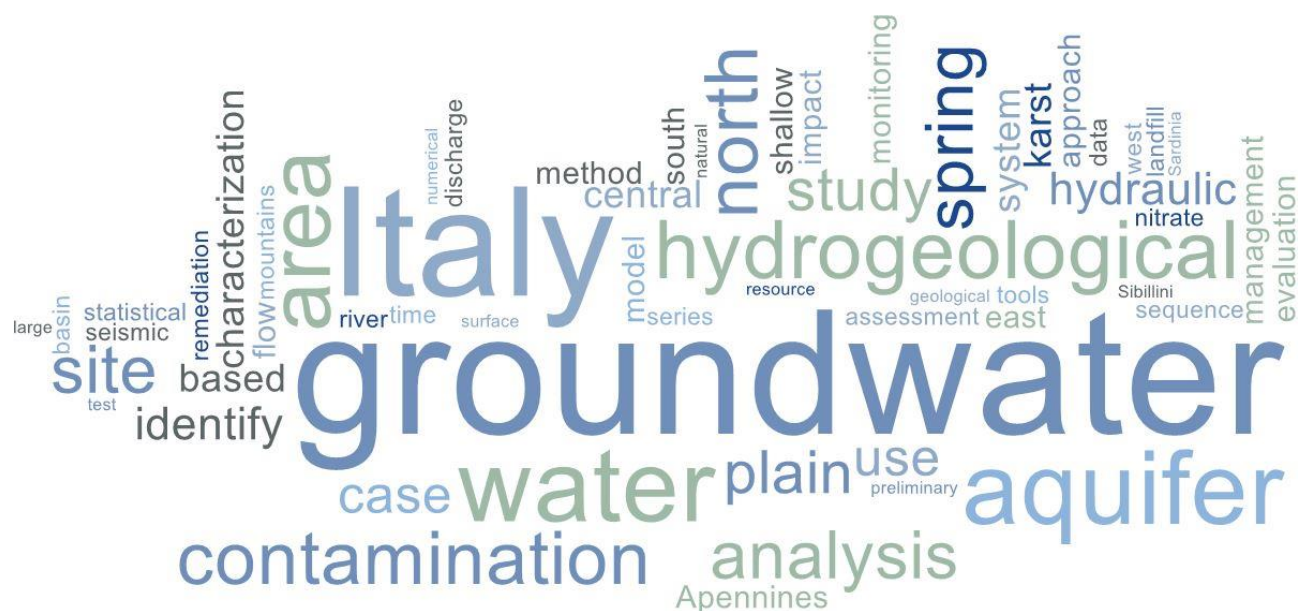
12:30 - 13:00	FRACTURED ROCKS AND KARSTIC SYSTEMS
	POSTER SESSION
FRKS11	Multidisciplinary geophysical surveys for 3D hydrogeological conceptual model reconstruction in areas contaminated by fluoride in Nakuru area, East African Rift System (Kenya) <i>Stefano Bernardinetti, Chiara Gargiulo, Alessio Barbagli, Andrea Zirulia, Tommaso Colonna, Enrico Guastaldi, Paolo Conti, Lisa Serri, Stefano Bonfigli, Claudio Zanghirati, Luigi Antolini, Elias K. Ucakuwun, Stefania Da Pelo, Roberto Balia, Marco Pistis, Giorgio Ghiglieri</i>
FRKS12	Hydrologic balance estimation in the Mucille (NE Italy) test site <i>Philippe Turpaud, Luca Zini, Chiara Calligaris</i>
FRKS13	Response of the main springs of the Sibillini Mountains area to the 2016-2017 seismic sequence <i>Davide Fronzi, Francesca Banzato, Costanza Cambi, Roberto Checcucci, Lucia Mastrorillo, Francesco Mirabella, Torquato Nanni, Marco Petitta, Alberto Tazioli, Daniela Valigi</i>
FRKS14	The Pilato Lake (Sibillini Mts., Central Italy): first results of a study on the supposed variations of its hydrogeological conditions induced by the seismic sequence 2016-2017 <i>Lucio Martarelli, Rossella Maria Gafà, Paolo Maria Guarino, Gennaro Maria Monti, Luca Maria Puzzilli, Angelantonio Silvi</i>
FRKS15	The impact of geomorphologic structure on rain water infiltration and groundwater recharge in semi-arid zone <i>Or Letz, Roey Egozi, Ofer Dahan</i>
FRKS16	Spring discharge monitoring network in a high-alpine setting: an example from the Pale di San Martino (Dolomites Mountains, Italy) <i>Giorgia Lucianetti, Roberto Mazza, Lucia Mastrorillo, Piergiovanni Partel</i>
FRKS17	Can geoentropy be used to predict transport in fractured media? Results from preliminary tests <i>Daniele Pedretti, Marco Bianchi</i>
FRKS18	Groundwater flow in the Ischia volcano and implications of thermal water withdrawals <i>Vincenzo Piscopo, Francesca Lotti, Luigi Lana</i>
FRKS19	Statistical analysis of the impact of snow melting and rainfall recharge on the discharge and physico-chemical characteristics of the Verde spring (Central Apennines) <i>Alessandro Chiaudani, Diego Di Curzio, Sergio Rusi</i>
FRKS20	Grey-box data driven based method for karst spring discharge evaluation <i>Giuseppe Sappa, Francesco Maria De Filippi, Silvia Iacurto, Gerardo Grelle</i>
FRKS21	Discharge measurements based on tracer dilution method applied to the hydrogeological study of karst springs in the Mount Albo area (Sardinia NE) <i>Antonio Maria Sessini, Francesco Sanna, Giorgio Ghiglieri</i>

FRKS22	The lateral groundwater exchanges from Mt. Maggiore aquifer and Riardo Plain hydrogeological system <i>Stefano Viaroli, Emilio Cuoco, Lucia Mastrorillo, Vittorio Paolucci, Dario Tedesco, Roberto Mazza</i>
FRKS23	Identification and characterization of the karst areas of the Friuli Venezia Giulia Region (NE Italy) <i>Luca Zini, Chiara Calligaris, Furio Finocchiaro, Paolo Manca, Chiara Piano, Michele Potleca, Maurizio Ponton, Luca Terribili</i>

17:30 - 18:00	URBAN HYDROGEOLOGY
	POSTER SESSION
UH11	Groundwater modeling and isotope investigations for the Water Safety Plan implementation in Milan metropolitan area <i>Laura Scesi, Luca Alberti, Martino Cantone, Mariachiara Caschetto, Paola Gattinoni, Ivana La Licata, Massimo Marchesi, Angelo Ortelli, Gabriele Oberto, Marta Gangemi, Angela Manenti, Matteo Monti</i>
UH12	A preliminary method for the assessment of groundwater flooding susceptibility in urban and rural areas <i>Silvio Coda, Vincenzo Allocca, Domenico Calcaterra, Pantaleone De Vita, Diego Di Martire</i>
UH13	Water resources provided by the major aquifers in the Province of Siena within the framework of the Provincial Territorial Plan (PTCP) <i>Piero Barazzuoli, Fausto Capacci, Jenny Migliorini</i>
UH14	Evaluation of hydrofacies connectivity and hydraulic properties by using facies and sequence stratigraphy analysis: the case of the Palatine Hill, central archaeological area of Rome <i>Cristina Di Salvo, Luca Laudati, Marco Mancini, Mattia Marini, Salvatore Milli, Massimiliano Moscatelli, Francesco Stigliano, Maurizio Simionato, Gian Paolo Cavinato</i>
UH15	Evaluation of nitrate trends in groundwater: a case study in a groundwater body in southern Italy <i>Daniela Ducci, Renata Della Morte, Adolfo Mottola, Giuseppe Onorati, Giovanni Pugliano</i>
UH16	Groundwater quality assessment downstream Mediouna landfill (Casablanca Morocco) <i>Ahmed Fekri, Chakib Marrakchi, Ouafa El Hammoumi</i>
UH17	Thermodimensional assessment of GWHPs: compare with analytical and numerical simulations approach <i>Glenda Taddia, Stefano Lo Russo, Elena Cerino Abdin, Martina Gizzi</i>



UH18	Implementation of satellite-based data for improving predictions of arsenic contamination in groundwater in the Red River Delta in Vietnam <i>David Haaf, Licia C. Pollicino, Stefania Stevenazzi, Marco Masetti, Son V. Nghiem, Michael Berg, Lenny H.E. Winkel</i>
UH19	How long will it take? Estimating groundwater recovery time from nitrate contamination in the highly impacted Lombardy plain (northern Italy) <i>Arianna Musacchio, Marco Rotiroti, Viviana Re, Harald Oster, Barbara Leoni, Enrico Allais, Elisa Sacchi</i>
UH20	Evaluation of the deposition, infiltration and drainage of the atmospheric pollutants in the vadose zone <i>Marco Masetti, Corrado Camera, Daniele Pedretti, Stefania Stevenazzi</i>
UH21	Using water level and temperature coupled data series to improve hydrogeological parametrization in a complex alluvial system <i>Luca Vettorello, Andrea Sottani, Francesco Trevisan</i>
UH22	Aquifer vulnerability in parts of Yenagoa, Southern Niger Delta, Nigeria <i>Willabo A. Miepamo, Bisong Andy Etta, Ebi Oborie, Justin Ikirigo, Bethel Okpomu</i>
UH23	Geochemical study to identify the source of nitrate in the carbonate aquifer (southern Italy) <i>Livia Emanuela Zuffianò, Pier Paolo Limoni, Giorgio De Giorgio, Maurizio Polemio</i>



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