

eurokarst 2018

 **BESANÇON**
2 - 6 July

TECHNICAL PROGRAM AND PRATICAL INFORMATIONS



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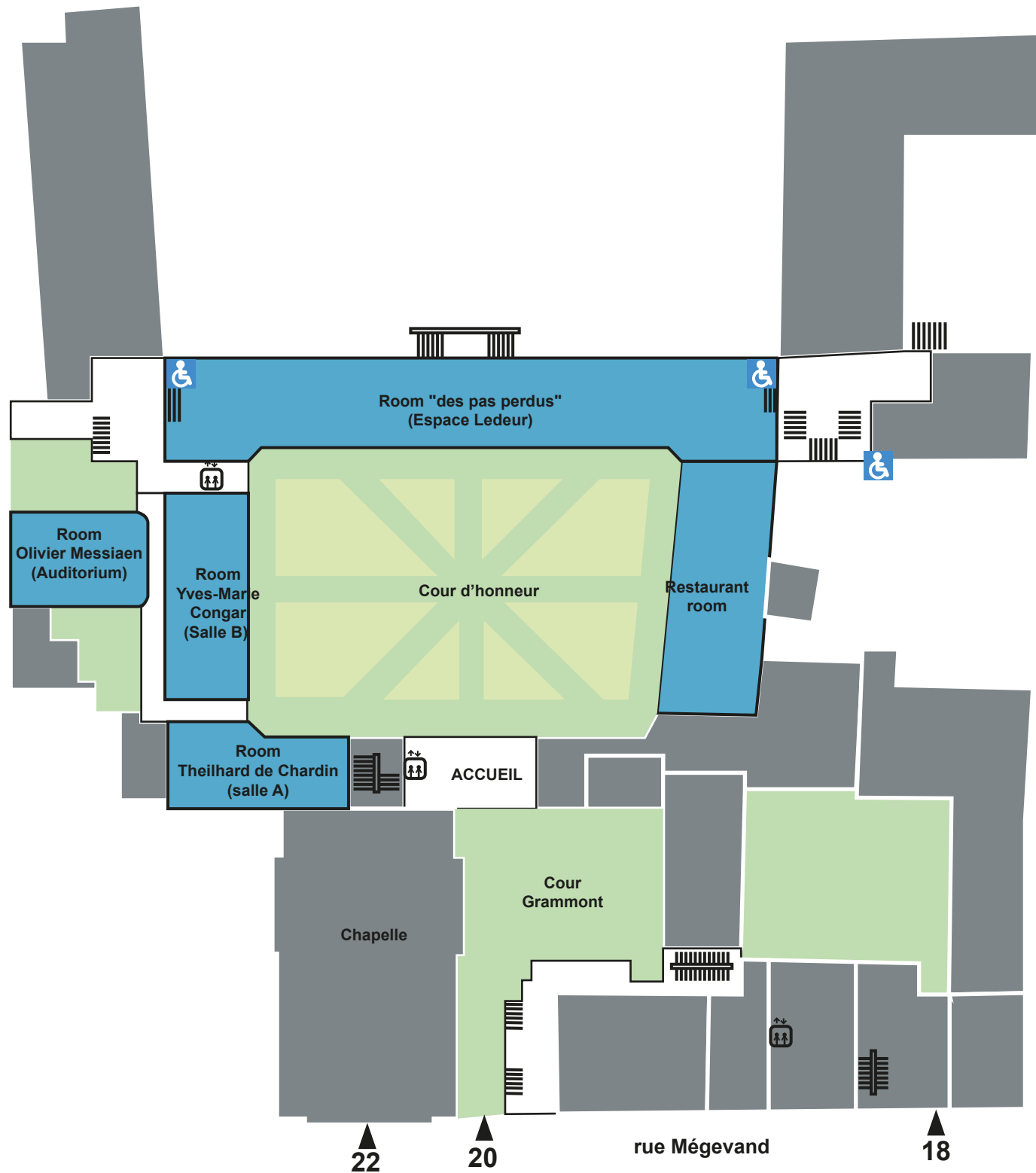
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Ground floor



Program Overview

Sunday, July 1st
18h-20h [Registration](#)

Monday, July 2nd

08:00	Registration
08:35	Opening ceremony
09:00	Plenary session Keynote- Andreas Hartman
10:20	Coffee break
10:50	Parallel sessions
12:10	Lunch
13:40	Parallel sessions
15:00	Posters presentation and coffee break
17:00	Parallel sessions
18:30	visit of the citadelle
20:30	Icebreaker

Tuesday, July 3rd

08:30	Registration
09:00	Plenary session Keynote Zoran Stevanovic
10:20	Coffee break
10:50	Parallel sessions
12:30	Lunch
14:00	Parallel sessions
15:20	Posters presentation and coffee break
17:10	plenary sessions keynote Hervé Jourde
18:30	Annual meeting of the IAH Karst Commission
19:30	Conference dinner

Wednesday, July 4th

08:30	Registration
09:00	Plenary session Keynote Yongyong Hao
10:20	Coffee break
10:50	Parallel sessions
12:30	Lunch
14:00	Parallel sessions
15:00	coffee break
15:30	plenary sessions keynote Michel Bakalowicz
16:50	Closing ceremony

Thursday, July 5th

Fieldtrips: the Loue and Lison springs/the upper Jura Mountains – the Mont d’Or area/Val de Travers (Swiss Jura mountains)

Friday, July 6th

Workshop 1: KARSYS, KarstALEA and KarstFlowSIM: applied and innovative methods for the management of karst environments

Workshop 2: PaPRIKa, a multi-criteria method for vulnerability mapping of karst aquifers / KarstMod, an adjustable platform for hydrodynamic modeling in karst aquifers

Monday July 2nd - Morning

8:00 Registration, Room "des Pas perdus", Espace Ledeur

Plenary Session -Room Yves-Marie Congar (Grande Salle B) - Chairman: Catherine Bertrand

8:35 *Opening ceremony* : **Nicolas Chaillet**, President of the Community of Universities and Schools, University of Bourgogne Franche-Comté
Christophe Lime Deputy Mayor of Besancon in charge of water operation and sanitation in the agglomeration

9:00 **Keynote: "From the karst springs of the Jordan river to entire continents – challenges and opportunities of large-scale karst modelling"**.
Andreas Hartmann (University of Freiburg, Germany)

9:40 **A flood pulse triggered temporal and spatial dynamics of water quality in a binary karst aquifer: example from SW Slovenia.**
Natasa Ravbar (Karst Reseach Intitute, Slovénie) M. Petrič, Blaz Kogovšek, M. Blatnik, C. Mayaud, S. Al Sayegh Petkovšek, M. Bole, J. Mulec and F. Gabrovšek

10:00 **Karstogenesis modelling of a regional Mediterranean aquifer (Lez, France).**
Véronique Leonardi (University of Montpellier) and G. Massonnat

10:20

Coffee break

Parallel Session - Room Yves-Marie Congar (Grande Salle B)

Vulnerability and groundwater protection

Chairman: Lou Maurice

10:50 **Revision of karst vulnerability assessment to address the protective effect in a quantitative manner,**
M. Sinreich, A. Pochon, S. Kilchmann and R. Kozel

11:10 **Groundwater vulnerability assessment in the Strategic Greek Karst Aquifer of Damasi Titanos using QGIS PaPRIKa plugin.**
N. Kazakis, C. Ollivier, K. Chalikakis, N. Mazzilli, A. Manakos and K. Voudouris

11:30 **Démarche de préservation des ressources en eau souterraine pour la satisfaction des besoins futurs. Les travaux engagés sur les masses d'eau karstiques du bassin Rhône - Méditerranée.**
L. Cadilhac and T. Marguet

11:50 **Impacts of human activities on subterranean ecosystems - macroecological and conservation perspective.**
A.S. Reboleira

12:10

Parallel Session - Room Olivier Messiaen (Auditorium)

Regional studies - Flow processes

Chairman: Anita Eröss

Classification of carbonate aquifers based on hydrograph analysis.
A. Kovacs

Comprehensive hydrogeological study of a hypogenic cave in South Hungary.
K. Csondor, A. Tóth, J. Dezsó, Sz. Leél-Őssy and A. Eröss

The Fontestorbes intermittent karst spring : New results deduced from high frequency monitoring in the karst drainage system.
V. Bailly-Comte, B. Ladouche, N. Ravaiau and J.C. Maréchal

Unveiling the ground water flow within the Ljubljana River recharge area, Slovenia.
M. Blatnik, C. Mayaud and F. Gabrovšek

Parallel Session -Room Theilhard de Chardin (Salle A)

Geophysics

Chairman: Julie Albaric

The Whispering Karst.
C. Champollion and A. Haned

Groundwater resources exploration and sustainable management in discontinuous continental Neogene relying on a karst plateau (Mahafaly-SW Madagascar).
S. D. Carrière, K. Chalikakis, J. Lapègue, M. Mangin, J. Kempf, J. B. Randriatsitohaina, C. Ollivier and T. Razakamanana

Combining dissolved gas, gravity and hydrodynamic measurements in a spatially distributed conceptual model of the Durzon karst systems (South of France).
L. Perotin, V. de Montety, C. Champollion, M. Dupuy, V. Bailly-Comte and B. Ladouche

LiDar Scanning on Notches in Karst Towers in Kinta Valley, West Malaysia.
R. F. Muhammad and M. A. M. Hellmy

Lunch, Room Cana

Monday July 2nd - Afternoon

Parallel Session - Room Yves-Marie Congar (Grande Salle B)
Vulnerability, groundwater protection, and civil engineering
Chairman: Nadine Goeppert

- 13:40 **Karst hydrogeology of the UK Chalk aquifer and implications for groundwater protection.**
L. Maurice, S. Loveless, B. Brauns, J. Bucknall, C. Manning, H. Verman, A. Leggatt, I. Karapanos, G. Davies, C. Hampton, A. Farrant, T. Roth and T. Atkinson
- 14:00 **Proposal to delimit a Geopark as a hydrogeological reserve in the karst system of Playa del Carmen, Quintana Roo, Mexico.**
A. López-Tamayo, P. Beddows, F. Lases-Hernández, P. Sprouse, A.L. Córdova-Lira, T. Ramírez-González, R. Padilla-Borja, J. Áviles-Olguin Segovia and O. Von Bertrab
- 14:20 **Karst and deep geological repositories for radioactive waste - the regulatory perspective.**
M. Herfort
- 14:40 **GIS based applied regulatory approach for covered karst aquifer management; a cases from west of Iran.**
K. Taheri, M. Taheri and F. Mohsenipour

Parallel Session - Room Olivier Messiaen (Auditorium)
Regional studies -
Chairman: Bartolomé Andreo

- Evaluation of nitrate sources and fate in karst aquifers using nitrate isotopes: Application to Toulon karst system (Périgueux, France),**
G. Lorette, R. Lastennet, D. Buquet, N. Peyraube, M. Sébilo, J.C. Studer and A. Denis
- Impact of rainfall events on the sulfate variability of a complex gypsum-carbonate karst spring.**
S. Frank, N. Goeppert and N. Goldscheider
- Characterization of a karstic hydrosystem by a multidisciplinary approach : the case of the Barrois limestones.**
S. Gignoux, V. Busquet, A. Villeneuve, K. Chalikakis, N. Mazzilli and P. Landrein
- The effect of drought and wet year on the Bibi -Talkhone karstic spring in the southwest of Iran.**
N. Kalantari, H. Zarei and A. Nadri

Parallel Session -Room Theilhard de Chardin (Salle A)
Data analysis and numerical modeling
Chairman: Laurence Gill

- Physical and hydrological meaning of the spectral information from hydrodynamic signals at karst springs.**
A. Dufoyer, N. Lecoq, N. Massei and J.C. Marechal
- Combining distributed numerical modelling and signal decomposition techniques to study internal discharges of a karst catchment in Ireland.**
L. Duran, P. Schuler and L. Gill
- Understanding flooding in Planinsko Polje (Slovenia).**
C. Maysaud, M. Blatnik, F. Gabrovšek, B. Kogovšek, M. Petrič and N. Ravbar
- Influence of karsts on the radon production and migration: experimental data and numerical modelling (Fourbanne site, French Jura Mountains).**
C. Gréau, N. Mansouri, G. Ielsch, Z. Saâdi and C. Bertrand

- 15:00 Poster Blitz presentations - Plenary Session - Room Yves-Marie Congar (Grande Salle B)
15:30

Poster session with Coffee

Monday July 2nd - Afternoon

Parallel Session - Room Yves-Marie Congar (Grande Salle B)

Regional studies

Chairman: Zoran Stevanovic

17:00 **Hydrogeological framework for a safe and sustainable water supply system in the Dong Van Karst Plateau UNESCO Global Geopark, Vietnam.**

N. Goldscheider, A. Ender and N. Goepfert

17:20 **Multidisciplinary approach for the characterisation of regional aquifers and the sustainable management of groundwater resources: case studies of the Milk River Aquifer (Canada-USA) and the Thau karstic aquifer (France).**

M.A. Pétré, R. Lefebvre, A. Rivera, B. Ladouche, C. Lamotte, C. Batiot-Guilhe, V. de Montéty and J.L. Seidel

17:40 **Assessing hydrochemical interactions between humic-rich stream and shallow karst aquifer using natural tracers (Tuhala karst system, N Estonia).**

O. Koit, J. Barberá, I-K Kiivit, and T. Martma

18:30 **Visit of the Citadel (UNESCO World Heritage)**

20:30 **Icebreaker** - Espace Grammont

Parallel Session -Room Olivier Messiaen (Auditorium)

Geological control and speleogenesis

Chairman: Pauline Collon

Fault and karstification: extrapolation from case study of Saint-Clément fault, Languedoc, France.

V. Clauzon, V. Leonardi, S. Pistre, R. Soliva, J.P. Rolando, H. Jourde and G. Massonnat

Lithological and structural controls of cave development on Kornati Islands and introduction of EU project "Center of excellence -Cerovačke caves.

P. Kovac Konrad, N. Lončar and M. Talaja

Speleogenesis of some deep and long caves and karst springs in Croatia.

M. Garasic and D. Garasic

Parallel Session - Room Theilhard de Chardin (Salle A)

Time series analysis and modeling

Chairman: Anne Johannet

Improving Turbidity Forecasting by Neural Networks Thanks to Multiresolution Analysis. Case study on the Yport Basin (Normandie-France).

M. Savary, A. Johannet, N. Massei, J.P. Dupont and E. Hauchard

A predictive machine learning-based model for groundwater flooding in lowland karst.

L. Gill, T. McCormack and B. Basu

Impact of atmospheric pollution deposits on the dissolved inorganic carbon fluxes in karst aquifers: evidences from 40 years old monitoring of karstic watersheds.

S. Binet, J.L. Probst, C. Batiot-Guilhe, J.L. Seidel, C. Emblanch, N. Peyraube, A. Mangin, M. Backalowicz and A. Probst

Tuesday July 3th - Morning

8:30 Registration

Plenary Session - Room Yves-Marie Congar (Grande Salle B) - Chairman: Nico Goldscheider

9:00 **Keynote: "Groundwater as Essential Potable Water Source - Case Studies from Several Arid and Semi-arid African Countries".**
Zoran Stevanovic (University of Belgrade, Serbia)

9:40 **Abbé (Jean-Baptiste) Paramelle, 1790 - 1875, Pioneer Karst Hydrogeologist**
Patricia Bobeck, (Professional Geologist, State of Texas, Austin)

10:00 **New insights into the Cosquer art cave hydrogeological functioning (France).**
Bruno Arfib (CEREGE, Aix Marseille university, France), L. Vanrell and M. Olive

10:20

Coffee break

Parallel Session - Room Yves-Marie Congar (Grande Salle B)
Tracer tests
Chairman: Pierre-André Schnegg

10:50 **Interpretation of long-tailed breakthrough curves from tracer tests in karst aquifer systems.**
N. Goepfert, A. Ender and N. Goldscheider

11:10 **Field constraints and procedures in fluorescent dye tracing.**
P. Meus, A. Auler and P. Pessoa

11:30 **Artificial tracer tests interpretation for karstic system using transfer function approach.**
V. Sivelles and D. Labat

11:50 **Water tracing experiments in a quartzite karst area, chapada Diamantina; Northeastern Brazil.**
A. Auler, P. Meus t and P. Pessoa

12:10 **An assessment of karst aquifer prospective by the salt dilution method.**
M. Radulovic

12:30

Parallel Session - Room Olivier Messiaen (Auditorium)
Flow modeling
Chairman: Eulogio Pardo-Igúzquiza

Sensitivity analysis of a karst conduit flow and heat transport model with variable recharge and temperature using FEFLOW.
J. Berglund, L. Toran and E.K. Herman.

Model validation: confronting MODFLOW CFP to sandbox experimental results,
R. Pacheco, M. Ye, J. Zhao, X. Toa and X. Wang

Assessment of permeability evolution and scaling in karst aquifers based on multiscale DFN models.
M. Aliouache, V. Leonardi, X. Wang, A. Dausse and H. Jourde

Karst Modelling Challenge - A first comparison of various models for assessing the hydrological response of a karst aquifer.
P.Y Jeannin

KCM open discussion
P.Y Jeannin

Parallel Session -Room Theilhard de Chardin (Salle A)
Geochemistry and Geothermal systems
Chairman: Marc Steinmann-Hélène Celle-Jeanton

Geochemical insight on the weathering processes in a Mediterranean karstic watershed.
Y. Rahma, A. Galy and A. El Samrani

A field abacus for the estimation of saturation index with respect to calcite.
N. Peyraube, R. Lastennet, A. Denis, P. Malaurent and J. Villanueva

Dissolution process: when does the process start?
S. Magni

In-situ experimental study of chemical and biogeochemical precipitates of a flowing thermal water
P. Kovács-Bodor, O. Győri, Z. Kovács, Á. Bihari, V. Post, J. Mádl-Szőnyi

Radionuclides in groundwater flow systems - case studies from karst aquifers in Hungary.
A. Erőss and K. Csondor

Lunch, Room Cana

Tuesday July 3th - Afternoon

Parallel Session - Room Yves-Marie Congar (Grande Salle B)

Regional studies : Solute and particle transport

Chairman: Ronald Kozel

14:00 **Nature, Origin and Transfers of suspended particles matters (Mineral, Organic, and Biological) in karst hydrosystems: A New Methodological Approach by Morphogranulometry.**

D. Viennet, M. Fournier and J.P. Dupont

14:20 **Transportion of suspended particles and heavy metal ions in karst groundwater during rainstorm events: a study of Yaji Spring, SouthChina.**

Q. Zhang and Y-E Zou

14:40 **Transfer process of water and solute in the unsaturated zone of chalk.**

N. Chen, D. Valdes-Lao and P. Ribstein

15:00 **Carbon transport from a karst system in the Padurea Craiului Mountains of România - importance of suspended sediments and dissolved organic carbon.**

L. Florea, S. Banks and F. Forray

15:20 **Poster Blitz presentations - Plenary Session -Room Yves-Marie Congar (Grande Salle B)**

15:50

Plenary Session - Room Yves-Marie Congar (Grande Salle B) - Chairman: Mario Parise

17:10 **Keynote: Added value of a network of karst catchments observatories : example of the SNO KARST observatory network (France)**

Hervé Jourde (University of Montpellier, France)

17:50 **Assessing seasonal and low-flow groundwater storage of karst aquifers in Switzerland.**

Arnaud Malard (Swiss Intitute for Speleology and Karst Studies, La chaux-de-Fond, Suisse) P.Y. Jeannin, E. Weber and M. Sinreich

18:10 **The Functional significance of the hyporheic zone in karst water system.**

Fang Guo (Laboratory of Karst Dynamics, Guangxi, China) G. Jiang and S. Liu

18:30 **Annual meeting of the IAH Karst Commission- Room Yves-Marie Congar (Grande Salle B)**

19:30

Parallel Session - Room Olivier Messiaen (Auditorium)

Climate and Water Management

Chairman: Pierre-Yves Jeannin

Modeling the global change impacts on the Lez karst aquifer,

J.C. Maréchal, B. Ladouche and Y. Caballero

Karst limestone caves in north India : an aid to infer the climatic changes of the area.

S.K. Sharma

The CO2 dynamic in the contiuum atmosphere-soil-epikarst ans it's implicationon the karstification potential of epikarstic water : a case study of the Lascaux cave site (Montignac, France).

N. Houillon, R. lastennet, A. Denis and P. Malaurent

Using IDPR to characterize recharge area of karst aquifers from catchment to regional scales.

Y. Caballero, S. Pinson, J.B Charlier and S. Lanini

Parallel Session -Room Theilhard de Chardin (room A)

Geophysics and remote sensing

Chairman: Ros-Fatihah Muhammad

Variability of the water stock dynamics in karst: insights from geophysics.

B. Fores, N. Lesparre , C. Champollion and F. Nguyen

Groundwater vulnerability mapping of karst aquifers in Greece using the COP method, remote sensing and GIS techniques.

E. Zagana, EA. Nanou, M. Kakavas and K. Nikolakopoulos

Epikarst mapping by remote sensing: application to Sierra de las Nieves (Málaga, Spain).

E. Pardo-Igúzquiza, J. Luque-Espinar, A. Ruis-Constán, S. Martos-Rosillo and A. Pedrera

Estimation of recharge in karst aquifer using improved evapotranspiration monitoring thanks to remote sensing data.

C. Ollivier, A. Olioso, N. Mazzilli, K. Chalikakis, C. Velluet, C. Danquini and C. Emblanch

Poster session with Coffee

Conference dinner, Room Cana

Wednesday July 4th - Morning

8:30 Registration

Plenary Session - Room Yves-Marie Congar (Grande Salle B) - Chairman Philippe Renard

9:00 **Keynote: Karst hydrological process modeling from grey system approach to wavelet analysis**
Yongyong Hao (University of Tianjin, China)

9:40 **Carbonate Reservoir Fields: karst features recognition and modelling.**
A. Francesconi, Francesco Bigoni (ENI, Italy), F. Galatà, G. Leoni, R. Berto, F. Contento and M. Miarelli

10:00 **Setting up a high-resolution monitoring network to understand soil moisture and epikarst dynamics at 5 sites across the globe.**
Romane Berthelin (University of Freiburg, Germany) and A. Hartmann

10:20

Coffee break

Parallel Session - Room Yves-Marie Congar (Grande Salle B)
Groundwater contamination
Chairman: Nicolas Peyraube

10:50 **Karst-specific contaminant occurrence in Swiss groundwater resources**
R. Kozel, M. Sinreich, M. Reinhardt and S. Zimmermann

11:10 **Influence of recharge scenarios on karst contamination risk: field experiments and integrated methodology.**
A. Pochon and M. Sinreich

11:30 **Nitrate and phosphorous evolution in surface water and groundwater across space and time scales - the example of the Jura Mountains.**
J.B. Charlier, A. Vallet, D. Tourenne and G. Hévin

11:50 **Complex pollutant transfer in fractured and karstified chalk aquifer systems in Eastern Normandy, France.**
D. Pennequin, P.-Y. David and B. Meire

12:10

Parallel Session - Room Olivier Messiaen (Auditorium)
Geological control and speleogenesis
Chairman: Véronique Léonardi

Morphogenèse récente de la marge cévenole, nouveaux apports quantitatifs.
O. Malcles, P. Vernant, J.F. Ritz, P. Camps, J. Chery, D. Fink and G. Cazes

Geological setting of the Païolive karst (Ardèche, South of France) : consequences on its genesis and vertical development.
C. Baral, M. Serrane and S. Pistre

Etude morphokarstique de l'hydrosystème de la Cèze.
B. Chadelle, B. Arfib and H. Camus

Karstic Water potential based on the Geological view in the North East of Iran.
M. Morsali and E. Aliakbardoust

Parallel Session - Room B103 - Room Theilhard de Chardin (Salle A)

Numerical modeling
Chairman: Attila Kovacs

A two dimensional terrain and pipe network model of a lowland karst catchment in the west of Ireland.
P. Morissey and L. Gill

Bayesian inversion of karstic conduit position using posterior population expansion.
P. Renard, C. Jäggi, J. Straubhar, L. Mercerat and J. Bodin

Simplified varkarst semi-distributed model applied in Villanueva Del Rosario karst system (Malagá, Spain).
J. Martín-Arias, A. Hatmann, M. Mudarra, P. Martínez-Santos and B. Andreo

Using simple pseudo-3D hydrogeological modelling and a simplified agronomical representation to build a pertinent decision-making tool for local stakeholders: the Vivier karstic spring (France) case study.
L. Abasq, N. Surdyk and M. Lambert

Lunch, Room Cana

Wednesday July 4th - Afternoon

Parallel Session - Room Yves-Marie Congar (Grande Salle B)

Sinkholes and their formation

Chairman: Matej Blatnik

14:00 **Detection and analysis of sinkholes through integration of field surveys and semi-automated techniques.**

M. Parise, L. Pisano and V. Zumpano

14:20 **Karstic processes evolution in the Risle river, their impacts on surface water/groundwater interaction, river flow loss dynamics study and impacts on groundwater.**

P.Y. David, D. Pennequin, B. Meire, J.B. Charlier, B. Ladouche, S. Helouin and V. Feeny-Ferreol

14:40 **Fractal analysis of karst landscapes: the case of Sierra de las Nieves (Málaga, Spain).**

E. Pardo-Igúzquiza and P. Dowd

15:00

Plenary Session - Room Yves-Marie Congar (Grande Salle B) - Chairman Jacques Mudry

15:30 **Keynote : From J. Cvijic to A. Mangin or how a karst landscape was transformed into a complex karst hydrosystem"**

Michel Bakalowicz (University of Montpellier, France)

16:10 **Hydraulic assessment of a large lacustrine ecosystem at the interface of unconfined and confined carbonates.**

Ádam Tóth (Eötvös Loránd University, Budapest, Hungary) and J. Mádl-Szőnyi

16:30 **Imaging in a Model the Flow Networks generated by Harmonic Pumping Tests in a Karstic Field (Lez Aquifer, France).**

P. Fischer (University of Rouen), A. Jardani H. Jourde, X. Wang, S. Chedeville, M. Cardiff and N. Lecoq

16:50 **Closing ceremony** - Delivering of the **Young Karst Research Prize** by the IAH Karst Commission and of the **Best Eurokarst Poster Prize** by the organizers

Parallel Session - Room Olivier Messiaen (Auditorium)

Subsurface/groundwater relation

Chairman: Philippe Meus

Approche interdisciplinaire pour la quantification du potentiel de soutien d'étiage des zones humides au cours d'eau ?

Application à la tourbière de Frasne (Doubs, France).

F. Paran, D. Graillot and J. Ré-Bahuaud

Karst/river interaction, elaboration of an indicator of the karst hydric state using karstic spring flows, applied to the Cèze River (Gard, France),

H. Chapuis, J. Ré-Bahuaud, J.Jolivet, F. Paran and D. Graillot

Interest of chlorophyll-a survey in karst-river relation: a case study in karstic limestones of Ouche valley, Burgundy (France).

T. Gaillard

Parallel Session -Room Theilhard de Chardin (room A)

Hydrochemical variations in karst

Chairman: Jean-Baptiste Charlier

Contribution of $\delta^{13}\text{C}_{\text{TDIC}}$ in the determination of karstic water saturation with respect to calcite.

G. Lorette, R. Lastennet, A. Denis and N. Peyraube

Detailed water quality monitoring at various points of the Krásňohorská Cave system (Slovakia).

P. Malik

Optimization of high-resolution monitoring of water nutrients in karstic environment using a PLSR calibration model of a UV-VIS spectrometer.

A. Vallet, J.B. Charlier and F. Moiroux

Coffee break

Poster program

All posters will be on display during the whole conference from Monday to Wednesday to leave ample room for discussions around the posters.

Poster blitz session: Plenary session where each poster is briefly presented with only 1 slide and in 1 minute to introduce the posters before the poster session.

Note that the name of the speaker for each poster (blitz presentation and poster presentation) is underlined in the program below.

Poster session: the speaker is expected to remain around his poster during the poster session following his presentation during the poster blitz.

Posters presented during the poster Blitz session of Monday

ID	TITLE	AUTHORS
1	Karst Modelling Challenge: application of the GARDENIA rainfall-runoff model on the Milandre karst system (Jura, Switzerland)	<u>J.B. Charlier</u> , D. Thiéry
2	Simulation of multiple-peaked skewed breakthrough curves with the new open-source program OM-MADE.	<u>P. Collon</u> , A.J. Tinet, L. Dewaide and V. Hallet
3	Hydrogeological characterization of the lukewarm springs in Kistapolca (South Hungary)	<u>K. Csondor</u> , J. Godányi, A. Tóth, I. Müller, J. Dezső, A. Erőss
4	New developments in exploring the saturated zone of karst aquifers: Applications to the Quercy region (Southern France)	<u>C. Delporte</u> , P.Y. Galibert, C. Camerlynck
5	Development of a Freshwater Lens Assessment Protocol for Karst Islands	<u>R. DiFilippo</u>
6	Regional scale geochemical characterization of the Villány thermal karst area (South Hungary)	<u>A. Eross</u> , K. Csondor, T. Zádeczki
7	Hydraulic Analysis of Harmonic Pumping Tests for Identifying the Conduits Networks in a Karstic Aquifer	<u>P. Fischer</u> , A. Jardani, M. Cardiff, N. Lecoq
8	Characterization of nitrate origins and fate in a multilayer karst aquifer using $\delta^{15}N$ and $\delta^{18}N$ values (Périgueux, FRANCE)	<u>G. Lorette</u> , R. Lastennet, A. Denis, N. Peyraube, M. Sebilo, V. Vaury
9	Karst Modelling Challenge - semi-distributed pipe network and reservoir model (Ireland)	<u>L. Gill</u> , P. Schuler, L. Duran
10	Rôle d'un karst andin tropical (Alto Mayo, Pérou) dans la dynamique de production de matériel dissous vers l'Amazone ? Analyse du fonctionnement hydrogéologique et des flux associés	<u>LS. Hidalgo Sanchez</u> , C. Batiot-Guilhe, JL. Guyot, J. Apaéstegui, H. Jourde, N. Mazzilli, JS. Moquet, W. Santini, A. Sifeddine
11	First results of the semi-distributed VarKarst simulation model at the Milandre test site, Switzerland	<u>A. Hartmann</u>
12	Karst characteristics in arid regions: case study in Shotori Mountains, Iran	<u>G. Karami</u> , A. Taheri, H. Zia
13	Dye tracing as an effective method in the catchment area studies: Case study: Dimeh Spring, Iran	<u>H. Karimi Vardanjani</u> , A. Fazeli Farsani
14	Application of in situ experimental results in the problem of evolving precipitates in thermal water systems	<u>P. Kovács-Bodor</u> , I. Rába, O. Győri, A. Mindszenty, J. Mádl-Szőnyi
15	Karst and vegetation: biodiversity and geo-botany in the Sierra de las Nieves karst aquifer (Málaga, Spain)	<u>JA. Luque-Espinar</u> , E. Pardo-Igúzquiza, R. De La Vega-Panizo
16	Karst Modelling Challenge ? A semi distributed model for assessing the recharge of the Milandre karst aquifer (JU,	<u>A. Malard</u> , P.Y. Jeannin
17	Karst Modelling Challenge: lumped model contribution	<u>N. Mazzilli</u> , V. Guinot, D. Labat, H. Jourde, V. Sivelles, N. Lecoq Nicolas
18	Creation of karst system model as a result of complex aquifer monitoring (example on Beljanica Karst area)	<u>S. Milanovic</u> , L. Vasic
19	A parsimonious distributed model (KARSTFLOW) for simulating rain-discharge in the Karst Modelling Challenge (KMC)	<u>E. Pardo-Igúzquiza</u> , P. Dowd, A. Pulido-Bosch, J. Luque-Espinar, J. Durán
20	Mesure en continu de la qualité des eaux de surface par spectrométrie UV-vis	P. Marinot
21	Laminar and turbulent discrete-continuum approach: MODFLOW-2005 Conduit Flow Process	T. Reimann, T. Wöhling, R. Liedl, <u>P.Y. Jeannin</u>
22	A double medium approach to simulate groundwater level variations in a fissured karst aquifer	<u>T. Robineau</u> , A. Tognelli, P. Goblet, F. Renard, L. Schaper
23	Hydrogeology of Dévoluy karstic system : new insights with dye tracing and rainfall-discharge model	<u>A. Zappelli</u> , A. Belleville, M. Jagercikova
24	Estimation of confined karst aquifer parameters via tide-induced head changes in a coastal observation well	<u>ZX. Zhao</u> , Y. Hao, T. Wang, TCJ. Yeh, X. Wang and H. Jourde

Posters presented during the poster Blitz session of Tuesday

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25	Far and deep into the brackish groundwater of coastal karst : crossing CTD time series monitoring in submarine spring and during cave diving exploration (Port-Miou and Bestouan - SE France)	B. Arfib , X.Méniscus, F. Swierczynski
26	Continuous monitoring of natural fluorescence and organic content of groundwaters as a tool to characterize recharge processes and vulnerability of karst aquifers	C. Batiot-Guilhe , M. Erostate, V. Bailly-Comte
27	Geological characterization and formation of a covered karstic reservoir (Urgonian limestones of the Gardon Basin, South of France) - Towards predicting the distribution and state of karstification	C. Baral , M. Séranne, P. Fénart and H. Camus
28	Preliminary results of hydrochemical and isotopic characterization of water saturated layers within the karst infiltration zone	R. Berthelin , R. Simler, N. Mazzilli, K. Chalikakis, C. Emblanch, M. Leblanc, D. Boyer
29	Hydrogéologie de la structure anticlinale d'Audignon (Landes, France) ? Comportement karstique et intégration dans les écoulements régionaux du sud du Bassin aquitain	O. Cabaret , E. Husson
30	Tide effect in karstic and non-karstic aquifers in the Guinea Gulf	B. Collignon
31	Le Pôle Karst : un outil au service des milieux et rivières karstiques jurassiens	V. Fister , JF. Froger
32	Analysis of the flow recessions of the main outlet of the Dyr karst (Tebessa - Algeria)	ML. Hemila , B. Djoulah
33	Karren above Custonaci (Sicily, Italy)	M. Knez, R. Ruggieri, T. Slabe
34	Evolution of the physico-chemical response of a binary karst aquifer during a hydrological year (Planinsko Polje, SW Slovenia)	B. Kogovsek , M. Petric, C. Mayaud, M. Blatnik, N. Ravbar, J. Mulec, F. Gabrovsek
35	Hydrochemical and isotopic characterization of karstic aquifer in the region of Tebessa Northeast Algeria	R. Legrioui, E. Baali , R. Mouici, A. Hamad, I. Abdeslam
36	Spatialization of runoff indicators on karstic basins : application in the Cévennes-Causse area (France)	M. Le Mesnil , JB. Charlier, R. Moussa, Y. Caballero, N. Dörfliger
37	Evaluation of turbidity sources using particle size distribution coupled to X-Ray and high-resolution monitoring	G. Lorette , A. Denis, J. Sabidussi, N. Peyraube, M. Fournier, D. Viennet, J. Gonand, J. Villanueva, R. Lastennet
38	Geological controls of the Sierra de las Nieves karst aquifer (Málaga, Spain)	JA. Luque-Espinar , E. Pardo-Igúzquiza, A. Ruiz Constan, S. Martos-Rosillo, A. Pedrera-Parias
39	Visual KARSYS ? a web-tool for the documentation of karst aquifers	A. Malard , PY. Jeannin, S. Randles, P. Hausmann, M. Vogel
40	Monitoring and preliminary analysis of the natural responses recorded in a poorly accessible streambed spring located at a fluviokarstic gorge in Southern Spain	JF. Martín Rodríguez , M. Mudarra Martínez, B. Andreo Navarro, B. De La Torre Martínez, JM. Gil Márquez, J. Martín-Arias, JM. Nieto López, J. Prieto Mera, MD. Rodríguez Ruiz
41	Characterization of low groundwater flow in a karst subsystem using long term series and tracer test in the Fontaine de Rivière cave in Belgium	P. Meus , J. Flament, L. Willems, L. Funcken, G. Roba, C. Chauveau
42	Réseau de Métiers CNRS "Milieux Souterrains et Karsts"	G. Monvoisin, S. Jaillet, A. Zappelli
43	Applicability and sensitivity analysis of four vulnerability assessment methods to the Yucatan karst, Mexico	M. Moreno-Gomez , C. Martinez-Salvador, W. Moulahoum, R. Liedl, C. Stefan
44	Assessment of Empirical and Analytical Methods for Estimation of Water Inflow rate into the Zagros Tunnel in Karstic Area, Kermanshah, Iran	HR. Nassery , N. Bayat
45	Unravelling the hydrodynamics behavior of karst systems through comparative hydrology	T. Olarinoeye , A. Hartmann
46	PaPRIKa toolbox : a standardization of karst aquifers vulnerability mapping	C. Ollivier , Y. Lecomte, K. Chalikakis, N. Mazzilli, C. Danquigny, C. Emblanch
47	Groundwater resources in the apulian karst: first outcomes of a project dedicated to monitoring the deep water table	M. Parise , L. Benedetto, M. Chieco, A. Fiore, M. Lacarbonara, C. Masciopinto, L. Pisano, A. Riccio, M. Vurro
48	Sources, sinks and role of drip water solutes at Yarrangobilly Caves, SE Australia	C. Tadros , P. Treble, A. Baker, J. Crawford, R. Roach
49	Applying a novel set of methods to improve hydrograph separation in Irish karst aquifers	P. Schuler , P. Koeniger, L. Duran, L. Gill
50	Hydrochemical characterization of a complex mediterranean karstic system to improve the regional management of the groundwater resources (Thau lagoon area, Montpellier, France)	MA. Pétré , C. Batiot-Guilhe, V. De Montety, B. Ladouche, C. Lamotte Claudine, JL. Seidel