

# Monday Sept. 5th - Morning

8:00 Registration

Plenary Session - Aula UNIMAIL - Chairman: Philippe Renard

8:45 Opening ceremony : Prof. F. Kessler (Vice-rector, University of Neuchâtel), Dr. C. Dufour (City of Neuchâtel)

9:00 **Keynote 1: Karst and Climate Change.**

Andy Baker (University of New South Wales, Sydney, Australia) • **Red Speaker's Corner**

9:40 **Karst Modelling Challenge.**

P.-Y. Jeannin (Swiss Institute for Speleology and Karst Studies, La Chaux-de-Fonds, Switzerland) • **Yellow Speaker's Corner**

10:00 **Characterization of groundwater dynamics in a karst aquifer through Active and Passive Fiber Optic DTS methods.**

O. Bour (Université Rennes 1, France), H. Le Lay, N. Simon, N. Lavenant, J. Bodin, N. Guihéneuf, B. Nauleau, G. Porel and T. Le Borgne • **Green Speaker's Corner**

10:20

Parallel Session - Aula UNIMAIL

**Vulnerability and groundwater protection**

Chairman: Peter Huggenberger

10:50 **Pesticides and microorganisms occurrence explained by karst hydrogeological fundamentals in conjunction with detailed agricultural land-use information.**

S. Zimmermann, M. Sinreich and R. Kozel

11:10 **Insight into origin and fate of the bacterial load in karst groundwater.**

M. Sinreich, A. Pochon and R. Kozel

11:30 **Characterization of vulnerability and turbidity origin at a karst aquifer exploited for drinking water supply by means of statistical analyses.**

M. Fournier, N. Massei, L. Duran and J.-P. Dupont

11:50 **Peru - mining in extreme environments - lessons learned 1996-2016.**

D. Evans

12:10

Parallel Session - Auditoire Louis Guillaume - 2nd floor

**Regional studies - Flow processes**

Chairman: Hakim Benabderrahmane

**Examining the functioning of a multilayer karst system. The case of Toulon springs (Dordogne, France).**

G. Lorette (\*), R. Lastennet, A. Denis and N. Peyraube

**Origin of the double-peaked breakthrough curves in the Furfooz karst system : field data, scale model and numerical modelling.**

L. Dewaide (\*), V. Hallet, A. Poulain and G. Rochez

**Seasonal and spatial organization of groundwater transfers in a karst aquifer.**

C. Delbart, D. Valdés, F. Barbecot and A. Tognelli

**Caractérisation des échanges entre karst et rivière par imagerie infrarouge thermique (IRT) aéroportée. La rivière Cèze et ses émergences karstiques au niveau du plateau de Méjannes-le-Clap (Gard, France).**

J. Ré-Bahuaud, H. Chapuis, D. Graillot, V. Lavastre, J. Jolivet, C. Le Gal La Salle

Parallel Session - Room B103 - Building B - 1st floor

**Geophysics**

Chairman: Konstantinos Chalikakis

**New laser/image processing system for non-interfering monitoring of slow flow velocities in the Ox Bel Ha karst conduit system (Quintana Roo, Mexico).**

A. Schiller

**Hydrogeophysics to monitor the vadose zone of the Rochefort karst system (Belgium).**

A. Watlet (\*), M. Van Camp, O. Francis, A. Poulain and O. Kaufmann

**Performance and first results of new superconducting gravimeter for hydrological studies.**

B. Fores, C. Champollion and N. Le Moigne

**Passive seismic methods for subsurface studies.**

J. Albaric, C. Champollion, B. Fores, D. Kühn, and A. Fort

*Coffee break*

*Lunch / Le Romarin*

# Monday Sept. 5th - Afternoon

Parallel Session - Aula UNIMAIL

**Tracer test**

Chairman: Lou Maurice

- 13:40 **An example of an accidental tracer test: the case of the Paradiso Spring (Santa Croce Camerina, Ragusa , Sicily).**  
P. Forti, R. Ruggieri, [J. De Waele](#), A. Fiorucci and B. Vigna
- 14:00 **Hydrogeological definition by artificial tracing between 2 rivers of karst system.**  
[H. Chapuis \(\\*\)](#), J. Ré-Bahuaud, J. Jolivet, D. Graillot and B. Guy
- 14:20 **Particle tracing and transport dynamics in an alpine epikarst system.**  
[N. Goepfert](#) and N. Goldscheider
- 14:40 **Tracer tests in the Luxembourg Sandstone (Southern Luxembourg) as a tool for groundwater protection.**  
[P. Meus](#), T. Schaul and J. Farlin

15:00 Poster Blitz presentation - Plenary Session - Aula UNIMAIL  
15:30

Parallel Session - Aula UNIMAIL

**Regional studies - Solute and particle transport**

Chairman: Bartolomé Andreo Navarro

- 17:00 **Hydrogeological investigations and a multitracer test in the Cansiglio-Cavallo karst area (Italian Alps).**  
M. Filippini, G. Squarzoni, M.L.V. Martina, A. Fiorucci, B. Vigna, L. Zini, B. Grillo, A. Riva, S. Rossetti, G. Casagrande, [J. De Waele](#) and A. Gargini
- 17:20 **Transport of solute and suspended matter elements during a flood event in a small karst aquifer.**  
[C. Cholet \(\\*\)](#), M. Steinmann, J.-B. Charlier and S. Denimal
- 17:40 **The influence of particulate organic matter in stream on inorganic carbon fluxes outflowing from a karst aquifer (Val d'Orléans France).**  
[S. Binet](#), J.-B. Charlier and P. Albéric

18:45 *Cocktail / lake side*

20:30 Conférence Publique - P. Malaurent et J.C. Portais - **La grotte de Lascaux de la découverte à aujourd'hui** - Aula des Jeunes Rives

Parallel Session - Auditoire Louis Guillaume - 2nd floor

**Regional studies - Flow processes**

Chairman: Didier Pennequin

- Hydraulics in the karstic system of Milandre (Jura, Switzerland).**  
[C. Vuilleumier \(\\*\)](#), P.-Y. Jeannin and P. Perrochet
- Hydraulics of Reka-Timavo system, Classical Karst, Slovenia-Italy.**  
[F. Gabrovsek](#) and B. Peric
- Managed Aquifer Recharge (MAR) to supply Libreville, a water-stressed city (Gabon).**  
[B. Collignon](#) and C. Ondo
- Origin of flash flood water of a Mediterranean river in karstic and urban environments by CTD monitoring (Las - Toulon - SE France).**  
[B. Arfib](#), C. Novaes, C. Baudement, C. Dufresne and C. Duffa

Parallel Session - Auditoire Louis Guillaume - 2nd floor

**Geological control and speleogenesis**

Chairman: Matt Covington

- Characterization of a paleokarstic oil field (Rospo Mare, Italy): sedimentologic and diagenetic outcomes, and their integration in reservoir simulation.**  
[A. Fournillon](#), G. Bellantani, A. Moccia, C. Jumeaucourt, P. Terdich, F. Siliprandi and F. Peruzzo
- Origine, caractérisation et distribution prédictive du karst sur la bordure nord-est du bassin aquitain.**  
[E. Husson](#), H. Camus, R. Couëffé, C. Lerouge, O. Cabaret and N. Pedron
- Modelling the development of karst network systems on carbonate platforms.**  
[A. Maqueda \(\\*\)](#), P. Renard and F. Cornaton

Parallel Session - Room B103 - Building B - 1st floor

**Spatial data analysis and numerical modeling**

Chairman: Pauline Collon

- Karst conduit networks simulation based on morphometric characterization of karst analogues.**  
J. Jouves, [S. Viseur](#), B. Arfib, Y. Guglielmi and H. Camus
- Geomorphometric analysis of karst terrains.**  
[E. Pardo-Iguzquiza](#), J.J. Durán, J.A. Luque-Espinar and P. A. Robledo-Ardila
- Karst groundwater resources assessment by application of the KARSYS approach - Plateau de Sault (France).**  
[V. Bailly-Comte](#), A. Malard, B. Ladouche, J.-C. Marechal, P.-Y. Jeannin, C. Allanic and L. Martel
- Geometry and topology of karstic networks: a statistical analysis.**  
[P. Collon](#), D. Bernasconi, C. Vuilleumier, and P. Renard

*Poster session with Coffee*

Parallel Session - Room B103- Building B - 1st floor

**Time series analysis and modeling**

Chairman: Nicolas Massei

- Karst flash flood forecasting using recurrent and non-recurrent artificial neural network model: The case of the Lez Basin (southern France).**  
T. Darras, L. Kong-A-Siou, B. Vayssade, [A. Johannet](#) and S. Pistre
- Artificial Neural Networks Modeling of a Karstic Watershed in Mount Lebanon.**  
[A. Allam \(\\*\)](#) and W. Najem
- Characterizing functioning of the Dyr karst (Tebessa - Algeria) by correlative and spectral analysis of hydro-pluviometric chronicles.**  
[M. L. Hemila](#), O. Guefaifia, L. Gouaidia and B. Djoulah

## Tuesday Sept. 6th - Morning

8:30 Registration

Plenary Session - Aula UNIMAIL - Chairman: Nico Goldscheider

9:00 **Keynote: New approaches to speleogenesis.**

[Matt Covington](#) (University of Arkansas, USA) ● **Red Speaker's Corner**

9:40 **Benefits of hydrograph analysis for the characterisation of karst aquifers.**

[Attila Kovacs](#) (Geological and Geophysical Institute of Hungary) ● **Yellow Speaker's Corner**

10:00 **Topographically driven fluid flow at the boundary of confined and unconfined sub-basins of carbonates: basic pattern and evaluation approach on the example of Buda Thermal Karst.**

[Judith Mádl-Szőnyi](#) and [Á. Tóth](#) (Eötvös Loránd University, Budapest, Hungary) ● **Green Speaker's Corner**

10:20

*Coffee break*

Parallel Session - Aula UNIMAIL

**Vulnerability, groundwater protection, and civil engineering**

Chairman: Ronald Kozel

10:50 **Hazard based water quality management of Karst springs - Combining the aquifer base gradient approach and the concept of dynamic vulnerability.**

[P. Huggenberger](#), J. Epting, R.M. Page, M. Besmer, F. Hammes and A. Auckenthaler

11:10 **Karst groundwater vulnerability: quantitative definition of a protection unit by correlating standardized tracer test results and mapping criteria.**

[A. Pochon](#) and M. Sinreich

11:30 **Representation of karst units in the Aquifer Reference System of France - BDLISA: challenges of small-scale mapping**

[J. Perrin](#), S. Schomburgk, D. Allier and J.-J. Seguin

11:50 **Barrage poids sur un karst. Cas de Hammam Grouz (Algérie).**

[M. Belkacem](#), B. Said and S. Tahar - To be confirmed

12:10

12:30

Parallel Session - Auditoire Louis Guillaume - 2nd floor

**Flow modeling**

Chairman: Jacques Bodin

**Modeling the hydrologic cycle in a Mediterranean high relief karst.**

[E. Pardo-Iguzquiza](#), J. J. Durán, J. A. Luque-Espinar, P. Robledo-Ardila and J. Heredia

**A cellular automata-based deterministic inversion algorithm for the characterization of linear structural heterogeneities.**

[P. Fischer \(\\*\)](#), A. Jardani and N. Lecoq

**Sensitivity analysis of hydrodynamics response to structure and flow parameters in a karstic reservoir.**

[L. Dal Soglio \(\\*\)](#), C. Danquigny, N. Mazzilli and G. Massonnat

**Hydro-system flow modelling for water resources management in the fractured and karstified chalk aquifer environment of Eastern Normandy**

[D. Pennequin](#) and P.-Y. David, M. Servièrre, N. Amraoui and C. Loiselet

**An integrated surface/subsurface flow model to investigate karstic aquifers: Example of the Barrois limestone aquifer system in the Meuse/Haute-Marne (France).**

O. Besson, [A. Benabderrahmane](#), J. Kerrou, L. Tacher and P. Perrochet

Parallel Session - Room B103 - Building B - 1st floor

**Heat and Geothermal systems**

Chairman: Olivier Bour

**Numerical simulation of fluid flow and heat transport evolution over geological time scales for the Buda Thermal Karst, Hungary.**

[T. Havril \(\\*\)](#), J. Molson and J. Mádl-Szőnyi

**Heat as a tracer for understanding transport processes in fractured media.**

[M.V. Klepikova](#), T. Le Borgne, O. Bour, M. Dentz, R. Hochreutener and N. Lavenant.

**In-situ experimental study of the development of biogeochemical precipitate in the discharge area of thermal waters, Buda Thermal Karst, Hungary.**

[P. Bodor \(\\*\)](#) and J. Mádl-Szőnyi

**The Santa Cesarea Terme cave system: thermal sulphur springs in the Apulian foreland (southern Italy).**

I. M. D'Angeli, J. De Waele, [M. Parise](#) and M. Vattano

**Geothermal potential assessment of carbonates based on spring characterization and numerical simulation, example of Transdanubian Range, Hungary.**

[A. Tóth \(\\*\)](#) and J. Mádl-Szőnyi

*Lunch / Le Romarin*

## Tuesday Sept. 6th - Afternoon

### Parallel Session - Aula UNIMAIL

#### Regional studies

Chairman: Juan José Durán

- 14:00 **Hydrogeological characterization of a geologically complex karst aquifer using natural responses. An example from Andalusia, southern Spain.**  
B. De La Torre Martínez, M. Mudarra Martínez, B. Andreo Navarro and C. Bertrand
- 14:20 **Hydrochemical and hydrodynamic behavior of the epikarst at the Lascaux cave (Montignac, France).**  
N. Houillon, R. Lastennet, A. Denis and P. Malaurent
- 14:40 **Analysis of natural responses and hydrochemical data by statistical approaches to characterize the hydrogeological functioning of a highly karstified evaporitic system in South Spain.**  
J.M. Gil-Márquez, M. Mudarra and B. Andreo Navarro
- 15:00 **Multidisciplinary approach to assess hydrology of karst vadose zone: from Han-sur-Lesse cave to the Rochefort Laboratory Cave (Belgium).**  
A. Poulain (\*), A. Watlet, O. Kaufmann, M. Van Camp, G. Rochez, K. De Bondt, P. Claeys and V. Hallet

15:20 [Poster Blitz presentation - Plenary Session - Aula UNIMAIL](#)

15:50

### Plenary Session - Aula UNIMAIL - Chairman: Catherine Bertrand

- 17:10 **Keynote: A petroleum engineering perspective on karst**  
Gérard Massonnat (Total SA, Pau, France) ● **Red Speaker's Corner**
- 17:50 **Evolution of conduit networks in transition from pressurised to free surface flow.**  
Franci Gabrovšek (Karst Research Institute, Slovenia), M. Perne and M. Covington ● **Yellow Speaker's Corner**
- 18:10 **Drip flow and gravity driven simulations of water transfer in vadose dolomite karst.**  
Cédric Champollion (Université de Montpellier, France), H. Jourde, A. Meauxsoone, J. Chéry and S. Deville ● **Green Speaker's Corner**

19:30

### Parallel Session - Auditoire Louis Guillaume - 2nd floor

#### Climate and Water Management

Chairman: Andreas Hartmann

- What is the relative impact of climate and land use changes on groundwater recharge given subsurface heterogeneity?**  
F. Sarrazin (\*), A. Hartmann, F. Pianosi and T. Wagener
- A simple but robust assessment of present and future karst systems recharge. To what extent does it help water managers for future water management?**  
Y. Caballero, L. Zerouali, S. Lanini, J.-B. Charlier, E. Lucas, L. Cadilhac and C. Pagé
- Seasonal trends in continuous physico-chemical spring data from karstified and fissured rocks in Switzerland**  
M. Schürch and R. Kozel
- What drives the long-term evolution of water quality in the Jura Mountains? A combined analysis of global change impacts.**  
J.-B. Charlier, Y. Caballero, J. Lions, B. Ladouche and E. Lucas

### Parallel Session - Room B103 - Building B - 1st floor

#### Flow processes

Chairman: Judit Mádl-Szonyi

- New insight on the dynamic of the Fontaine de Vaucluse karst hydrosystem from tilt measurements.**  
N. Lesparre, F. Boudin, J. Chéry, C. Champollion, C. Danquigny, K. Chalikakis and L. Longuevergne
- Influence of a carbonate series geodynamical evolution on the characterization of the actual karst reserves: Example from the Toulon area (SE, France).**  
C. Baudement (\*), Y. Guglielmi, B. Arfib, P. Léonide and J. Lamarche
- Comparison of mine drainage / karst springs discharge recession curves.**  
P. Malík and P. Bajtoš
- Vers une méthodologie pour un diagnostic pluridisciplinaire des échanges entre eaux superficielles (rivière) et eaux souterraines en domaine karstique. Exemple de la Cèze au niveau du plateau de Méjannes-le-Clap (Gard, France).**  
J. Ré-Bahuaud, H. Chapuis, D. Graillot, B. Guy, F. Paran, V. Wawrzyniak, H. Piegay, P. Marmonier, J. Jolivet, A. Johannet, D. Salze, V. Lavastre, A. Mayer and O. Radakovitch

*Poster session with Coffee*

*Conference dinner*

# Wednesday Sept. 7th - Morning

8:30 Registration

Plenary Session - Aula UNIMAIL - Chairman: Pierre-Yves Jeannin

9:00

**Keynote: Craters above salt caverns.**

Pierre Berest (Laboratoire de Mécanique des Solides (LMS), Ecole Polytechnique, Palaiseau, France) ● **Red Speaker's Corner**

9:40 **Challenges in managing karst aquifers in which caves are rare.**

Lou Maurice (British Geological Survey) ● **Yellow Speaker's Corner**

10:00 **The World Karst Aquifer Map (WOKAM).**

Nico Goldscheider (Karlsruhe Institute of Technology, Germany), Z. Chen and the WOKAM Team ● **Green Speaker's Corner**

10:20

*Coffee break*

Parallel Session - Aula UNIMAIL

**Groundwater contamination**

Chairman: Neven Kresic

10:50 **Integrative passive samplers to detect chlorinated hydrocarbons contamination in karst**

H. Demougeot-Renard, A. Bapst, C. Trunz, L. Fischer, and P. Renard

11:10 **Online measurements of enzymatic activity as an indicator for microbiological contamination in a highly vulnerable karst system in Northern Vietnam.**

A. Ender (\*), F. Grimmeisen, N. Goepfert and N. Goldscheider

11:30 **Radon production and migration in a karst system (Fourbanne site, French Jura mountains): preliminary results.**

G. Ielsch, Z. Saâdi, C. Bertrand, S. Denimal, G. Alcalde, E. Barker, C. Debayle and E. Manach

11:50 **Complex pollutant transfer in fractured and karstified chalk aquifer systems in two valleys of Normandy, France.**

D. Pennequin and P.-Y. David

12:10

*Lunch / Le Romarin*

Parallel Session - Auditoire Louis Guillaume - 2nd floor

**Civil engineering in karstic environments**

Chairman: Mario Parise

**The impact of water-conveyance tunnel on the groundwater conditions – a case study of Pirot area, southeastern Serbia.**

I. Jemcov, J. Radosavljević, A. Mladenović, J. Šišović, B. Trivić and R. Pavlović

**Subsurface flow and sulphate dissolution response to the construction and restoration of the River Weir in Hessigheim, Germany.**

H. Montenegro, R. Kauther, D. Strasser, T. Liesch and N. Goldscheider

**Karst Development under Technogenic Impact Conditions in the Western Urals.**

N.G. Maksimovich and O.Y. Meshcheryakova

**Development of karst in the Marunll Dam Site, Zagros Region, Iran.**

Z. Mohammadi and M. Karimi

Parallel Session - Room B103 - Building B - 1st floor

**Spatial data analysis and numerical modeling**

Chairman: Sophie Viseur

**Physical model of a coastal aquifer based on stratigraphic and thermal field reconstruction.**

E. Barca, D.E. Bruno, M.D. Fidelibus, G. Passarella and D. Sollitto

**KARSYS, for a better management of karst groundwater in Switzerland.**

A. Malard, P.-Y. Jeannin, J. Vouillamoz, E. Weber and D. Rickerl

**Karst simulation with Lindenmayer-systems and ODSIM.**

P. Collon, G. Rongier, P. Anquez and P. Mourlanette

**Application of the KARSYS modelling technique to lowland karst catchments in Ireland.**

T. McCormack, J. Vouillamoz, A. Malard, P.-Y. Jeannin, L.W. Gill

# Wednesday Sept. 7th - Afternoon

Parallel Session - Aula UNIMAIL

**Sinkholes and their formation**

Chairman: Jo de Waele

14:00 **Distribution and features of natural and anthropogenic sinkholes in Apulia.**

M. Parise and C. Vennari

14:20 **An integrated approach for investigations of ground-subsidence phenomena in the Ovaro village (NE Italy).**

C. Calligaris, S. Devoto, L. Zini and F. Cucchi

14:40 **Investigating physical processes leading to sinkhole occurrence in Val d'Orléans (France)**

J. Perrin, S. Pasquier, A. Gutierrez, D. Salquèbre, E.

Vandoudheusden, E. Joigneaux, C. Château, A. Guirimand-

Dufour, N. Jozja, C. Défarge and S. Binet

15:00

Plenary Session - Aula UNIMAIL - Chairman: Daniel Hunkeler

15:30 **Keynote: Groundwater contamination and remediation in karst.**

Neven Kresic (Amec Foster Wheeler, Kennesaw, USA)

16:10 **Use of rare earth elements and yttrium to quantify autogenic and allogenic inputs into turloughs in a lowland karst network.**

Laurence Gill (Trinity College Dublin, Ireland), C. Murphy, T. McCormack, M. Babechuk and B. Kamber

16:30 **Subsurface heterogeneity at Europe's karst regions enhances present day recharge and future climate sensitivity.**

Andreas Hartmann (University of Freiburg, Germany), T. Gleeson, Y. Wada and T. Wagener

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

Parallel Session - Auditoire Louis Guillaume - 2nd floor

**Geological control and speleogenesis**

Chairman: Franci Gabrovsek

**Statistical physics based models to study karst network geometry and topology in the area of Tulum.**

M. Hendrick (\*) and P. Renard

**Control of wormhole geometry on final dissolution patterns.**

Y. Cabeza (\*), J. Carrera and J.J. Hidalgo

**A particular case of karstification in dolostones (Waulsort Formation, Belgium).**

L. Dewaide (\*), V. Hallet and J.-M. Baele

Parallel Session - Room B103 - Building B - 1st floor

**CO<sub>2</sub> and hydrochemical variations in karst**

Chairman: Jacques Mudry

**Decomposition of CO<sub>2</sub> signal in Lascaux Cave.**

N. Peyraube, R. Lastennet, P. Malaurent, J.D. Villanueva and A. Denis,

**Effect of cave ventilation on karst water chemographs.**

P.-Y. Jeannin, A. Malard, P. Häuselmann and P.-X. Meury

**Comparison of flow processes in drains and low permeability volumes of a karst system in the French Jura Mountains. High-resolution hydrochemical characterization during a flood event.**

S. Denimal, C. Bertrand, M. Steinmann and N. Carry

*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. If the speaker is a PhD or MSc student, the name is followed by a star (\*).

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

**Poster locations:** Posters will be on display in the open area in the first and second floor of the building (see map)

Posters with an **odd ID number** (1, 3, 5, etc.) will be on the **first floor**.

Posters with an **even ID number** (2, 4, etc.) are located on the **second floor**.

## Posters presented during the poster Blitz session of Monday

ID	Title	Authors
1	A database to assess impacts of land use and climate change on Europe's karst regions	<u>Simon Brenner</u> , Vera Marx and Andreas Hartmann
2	Archives paléoclimatiques karstiques : trois événements majeurs au cours du dernier million d'années	<u>Christiane Causse</u>
3	A new compact field fluorometer designed for tracer test in cave environments	<u>Amaël Poulain</u> (*), Gaëtan Rochez, Jean-Pierre Van Roy, Lorraine Dewaide, Vincent Hallet and Geert De Sadelaer
4	Processes modelling applied to evaluation of karst hydrosystem recharge at the stand scale	<u>Simon Damien Carrière</u> , Charles Danquigny, Hendrik Davi, Konstantinos Chalikakis, Chloé Ollivier, Nicolas K. Martin-Stpaul and Christophe Emblanch
5	Groundwater flow and solute transport modeling in the Ox Bel Ha karst system (Quintana Roo, Mexico)	<u>Grégory Kaeser</u> (*), Axayacatl Maqueda, Martin Hendrick, Arnulf

		Schiller, Robert Supper and Philippe Renard
6	Verification of the karst flow model under laboratory controlled conditions and use of physical karst flow model	Hrvoje Gotovac, Ivo Andric, <u>Luka Malenica</u> (*) and Veljko Srzic
7	Numerical simulation of Managed Aquifer Recharge into a karst aquifer using an Equivalent Porous Medium approach	Julian Xanke, Hervé Jourde, Tanja Liesch and <u>Nico Goldscheider</u>
9	Hydrogeological conditions in genesis of the rare Circular Anemolites in caves (Dinaric karst, Croatia)	<u>Mladen Garasic</u> and Davor Garasic
12	Identification of exokarst relief through LIDAR technique: karst island of Cozumel, Mexico	<u>Oscar Frausto</u> , Angelica Zapi and Christian Koch
13	Shui Jing Po Shilin, Rock and Relief of Stone Forests on Cone Hills, Yunnan, China.	<u>Martin Knez</u> , Tadej Slabe and Hong Liu
15	Advanced airborne electro-magnetics for capturing hidden conduits and hydrological parameters by helicopter over the Ox Bel Ha karst conduit system (Quintana Roo, Mexico)	<u>Arnulf Schiller</u> and Ingrid Schattauer
19	Concentration of nitrates in Spanish carbonate aquifers: influence of soil TOC and land use	<u>Juan Antonio Luque-Espinar</u> , Eulogio Pardo-Igúzquiza, Juan Grima-Olmedo, Sandra Martínez-Romero, Juan José Durán-Valsero and Carlos Grima-Olmedo
20	Surface and groundwater quality vs. waste dumping within the Lagoa Santa Karst, Minas Gerais, Brazil	<u>Rafael Camargo</u> (*), Mylène L. C. Berbert-Born and José Roberto Cassimiro
21	Process-based modelling of contaminant attenuation in karst aquifers	<u>Michael Sinreich</u>
23	Deep Palaeozoic Karst: Geothermal Potential in Great Britain	<u>Nadia Narayan</u> (*), Jon Gluyas, Charlotte Adams, Jonathan Imber and Malcolm Butler
24	Dynamics of ground water level and temperature in karstic catchment of Ljubljana river, Slovenia	<u>Franci Gabrovsek</u> and Matej Blatnik
25	Hydraulic and geochemical characterization of the Villány thermal karst area (Hungary)	<u>Katalin Csondor</u> (*) and Anita Eröss
26	Karst development of Bolkar mountains (Southern Turkey)	<u>Koray Törk</u> , Noyan Güner, Fatih Savas, Korhan Çakir and İsmail Kahraman
27	Groundwater-surface water interaction analysis as a tool for environmental protection of the Upper Valley of Aniene River, Central Italy	<u>Giuseppe Sappa</u> and Flavia Ferranti
30	Hydrostructural characterization of the karst reservoir in the Umbria-Marche Apennine, Italy	<u>Andrea Tamburini</u> (*) and Menichetti Marco

## Posters presented during the poster Blitz session of Tuesday

ID	Title	Authors
31	Three conceptual models of groundwater circulation in gypsum rocks: some examples from Northern Italy	<a href="#">Bartolomeo Vigna</a> , Adriano Fiorucci and Jo De Waele
32	The Betteraz spring: an attempt to understand the origin of its contamination	<a href="#">Celia Trunz (*)</a> , Philippe Renard, H��l��ne Demougeot-Renard and Laurence Fischer
33	Excavation of a Ship Lock Under Uncertainty from Karst-Conduit Dominated Groundwater Flow	<a href="#">H��ctor Montenegro</a> and Uwe Hekel
34	Groundwater geochemistry of Su Bentu cave (Sardinia, Italy)	<a href="#">Laura Sanna (*)</a> and Jo De Waele
35	Identification of vadose karst voids and ventilation patterns using hydrochemical and geophysical methods (Maro Spring, Nerja, South Spain)	<a href="#">Jose Benavente</a> , I��aki Vadillo, Cristina Li��an, Francisco Jos�� Mart��nez-Moreno, Jes��s Galindo-Zald��var and Francisco Carrasco
36	Multidisciplinary hydrogeological approach in folded and faulted karst aquifers under intensive exploitation: the Bedmar-J��dar aquifer (Southern Of Spain)	<a href="#">Antonio Gonz��lez Ram��n</a> , Sergio Martos Rosillo, Ana Ruiz Const��n, Antonio Pedrera Parias, Jesus Galindo Zaldivar and Manuel Mart��nez Martos
38	Structural setting, underground water flow and hydrochemistry of the Alburni karst aquifer (southern Apennines, Italy)	Simona Cafaro, Claudio Pastore, Adriano Fiorucci, Bartolomeo Vigna, Marcello Schiattarella and <a href="#">Jo De Waele</a>
40	Hydrological budgeting of Red Lake (Dinaric Karst) in Croatia	<a href="#">Ivo Andric</a> , Hrvoje Gotovac, Veljko Srzic and Luka Malenica
41	Structure et Hydrog��ologie du pal��ozoique des monts d'Ougarta (La Saoura, sud Ouest alg��rien).	<a href="#">Touhami Merzougui</a>
42	Origine de l'eau d'une source karstique en relation avec une rivi��re – Etude par tra��ages artificiels et tests hydrauliques de la vuln��rabilit�� de la source Saint Antoine (Toulon- SE France)	Thierry Lamarque, Philippe Maurel, <a href="#">Bruno Arfib</a> , Th��r��se N'dah and C��cile Baudement
43	Int��gration de l'organisation redox des hydrog��osyst��mes de socle fissur��s dans la protection des eaux souterraines contre les pollutions nitrat��es diffuses.	<a href="#">Jean-Pierre Faillat</a>
44	Caract��risation hydrog��ochimique (ions majeurs et isotopes) des ��changes entre karst et rivi��re. La rivi��re C��ze et ses ��mergences karstiques au niveau du plateau de M��jannes-le-Clap (Gard, France)	<a href="#">J. R��-Bahuaud</a> , H. Chapuis H., Graillot D., Lavastre V., Jolivet J., Le Gal La Salle C.
45	Hydrochemical heterogeneity in karst tributaries on siliciclastic boundaries – Corrente River, Bahia – Brazil.	<a href="#">Emmanoel V. Silva Filho</a> , Karina L. Lecomte and Cristina C. Bicalho
46	Geochemistry and microbiology of waters in the gypsum karst areas of Emilia Romagna region (N-Italy).	Diana I. Serrazanetti, Chiara Montanari, Ilenia M. D'Angeli,
49	The multidisciplinary research of the karstic collapse in Konya closed basin (Central Turkey)	Davide Gottardo, Lucia Vannini, Fausto Gardini, <a href="#">Jo De Waele</a> <a href="#">Koray T��rk</a> , N. G��ner, B. Erduran, N.P. Yilmaz, S. Suluk��u, L. Yeleser, ��. Ate��, G. Mutlu, N. Sertel, S. Kele��, A. ��. ��. Demirba��, T. Toksoy, C. ��zg��r, S. Yavuz, K. Avci , C. ��zerk, and A. Bulut
50	Geometry and functioning of a compartmentalized karst aquifer using the KARSYS approach, Picos de Europa (Spain)	<a href="#">Daniel Ballesteros (*)</a> , Arnauld Malard, Pierre-Yves Jeannin, Montserrat Jim��nez-S��nchez, Joaqu��n Garc��a-Sansegundo, M��nica Mel��ndez-Asensio and Gemma Sendra
51	Karst conduit networks simulation based on morphometric characterization of karst analogues	<a href="#">Johan Jouv��s (*)</a> , Sophie Viseur, Bruno Arfib, Yves Guglielmi and Hubert Camus
52	Spectral analysis of time series of carbonate aquifer of Sierra Gorda	<a href="#">Juan Antonio Luque-Espinar</a> , Eulogio Pardo-Iguzquiza, Antonio Gonz��lez-Ram��n, Manuel L��pez-Chicano and Juan Jos�� Dur��n-Valsero
53	Turbidity forecasting with machine learning: Yport fresh water pumping well case study.	<a href="#">Micha��l Savary (*)</a> , Anne Johannet, Nicolas Massei, Jean Paul Dupont and Emmanuel Hauchard
54	Time-lag analysis of natural responses during unitary recharge events to assess the functioning of carbonate aquifers in Sierra de Grazalema Natural Park (Southern Spain)	Dami��n S��nchez, Jos�� Francisco Mart��n, <a href="#">Mat��as Mudarra</a> , Bartolomeo Andreo, Manuel L��pez-Rodr��guez and Mar��a Roc�� Navas
58	Improved Assessment of Groundwater Recharge in a Mediterranean Karst Region - Andalusia, Spain	<a href="#">Lara Kirn</a> , Mat��as Mudarra, Ana Mar��n, Bartolomeo Andreo and Andreas Hartmann
59	Vulnerability mapping of a vast karst hydrosystem. Application and adjustments of PaPRIKA method to the Fontaine-de-Vaucluse catchment (France)	Yoann Lecomte, <a href="#">Chlo��e Ollivier (*)</a> , Konstantinos Chalikakis, Charles Danquigny, Christophe Emblanch and Naomi Mazzilli



# Location & Getting There

University of Neuchâtel, Faculté des Sciences, Rue Emile-Argand 11

From Neuchâtel main station ✪ : 15 minutes walk or

bus number 107 to "Hauterive" or "Marin-Epagnier", stop "Portes-Rouges", from there 3 minutes walk

From Neuchâtel city center ✪:

bus number 101 to "Marin-Epagnier", stop "Bas-du-Mail", from there 5 minutes walk or

bus number 107 to "Hauterive" or "Marin-Epagnier", stop "Portes-Rouges", from there 3 minutes walk

Car: Parking available in front of the building on Esplanade du Mail ✪

