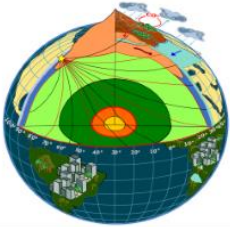


# Congress of PhD students 2020-2021

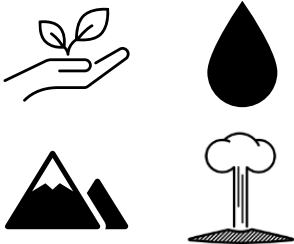
## The congress in 5 points



A talk session the 2<sup>nd</sup> of February 2021 and a poster session the 9<sup>th</sup> of February 2021 with a total of **38 presentations!**



The perfect occasion to meet new people, share sciences and win the best oral AND poster price!



### 4 topics:

- Fifty shades of deformation processes
- Geothermal reservoirs and fluid-rock interactions
- Near-surface hydrology: from the lab to the global scale
- Anthropogenic impact on the environment: make landscape, air and water quality great again!



A **KeyNote** from Christelle Roy : “Projet de territoire de Fessenheim : un engagement de la communauté scientifique dans une transition énergétique et environnementale réussie au sein de l’Europe”



For any question do not hesitate to contact us at [congresdesdoctorantsed413@gmail.com](mailto:congresdesdoctorantsed413@gmail.com). You also will find a lot of information on the congress **website**.

# Oral presentation day (The 2nd of February)

Due to the COVID pandemic, the oral presentation day will take place fully remotely on Big Blue Button. Please find below the connection link:

## [Link to the Congress room](#)

The oral day is divided in 4 sessions (2 in the morning, 2 in the afternoon), each session being dedicated to one the following topics:

- Fifty shades of deformation processes
- Geothermal reservoirs and fluid-rock interactions
- Near-surface hydrology: from the lab to the global scale
- Anthropogenic impact on the environment: make landscape, air and water quality great again!

For more information, please see the detailed program in the next pages.

Opening of the day (the 2nd of February, from 08:00 to 08:15)



Rendez-vous to the [main congress room](#) for the welcoming speech, and for drinking a coffee together!

KeyNote from Christelle Roy (the 2nd of February, from 08:15 to 08:45)

We are very honored to receive Ms. Christelle Roy, vice president of Strategy and development at the University of Strasbourg. Ms. Roy will give a talk about the involvement of the scientific community toward a successful environmental and energy transition in Europa. She will focus on the case of the dismantling of the Fessenheim nuclear power plant. For more details, please visit the [page of the project](#).

|                                                                                                                                                                   |                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 08:15 to 08:45                                                                                                                                                    | Christelle Roy (vice president of the chair "Strategy & development" at Strasbourg University) |
| Projet de territoire de Fessenheim : un engagement de la communauté scientifique dans une transition énergétique et environnementale réussie au sein de l'Europe. |                                                                                                |

Geothermal reservoirs and fluid-rock interactions (the 2nd of February, from 09:00 to 10:35)



*Injection well at the Theistareykir geothermal power plant (Iceland)*

|                                                                                                                                    |                                     |
|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 9:00 to 09:15                                                                                                                      | Jean-Baptiste MATHIEU (LhyGes/ITES) |
| Computation and use of pressure loss and enthalpy variation table in well layout optimization context                              |                                     |
| 9:20 to 9:35                                                                                                                       | Julien PORTE (IPGS/ITES)            |
| Complex resistivity inversion using Controlled Source Electromagnetic method                                                       |                                     |
| 9:40 to 9:55                                                                                                                       | Carole GLAAS (IPGS/ITES)            |
| Clay mineralogy: a signature of granitic geothermal reservoirs of central Upper Rhine Graben                                       |                                     |
| 10:00 to 10:15                                                                                                                     | Flora HOCHSCHEID (IPGS/ITES)        |
| Geochemical study of serpentinization along an ocean-continent transition zone: The Alpine Tethys as a case study (SE-Switzerland) |                                     |
| 10:20 to 10:35                                                                                                                     | dariush JAVANI (IPGS/ITES)          |
| Hydro-Mechanical Modeling of the Year 2000 Hydraulic Stimulation of GPK2 Well, Soultz-sous-Forêts, France                          |                                     |

Fifty shades of deformation processes: from Earthquakes to plate tectonics (the 2nd of February, from 10:40 to 12:35)

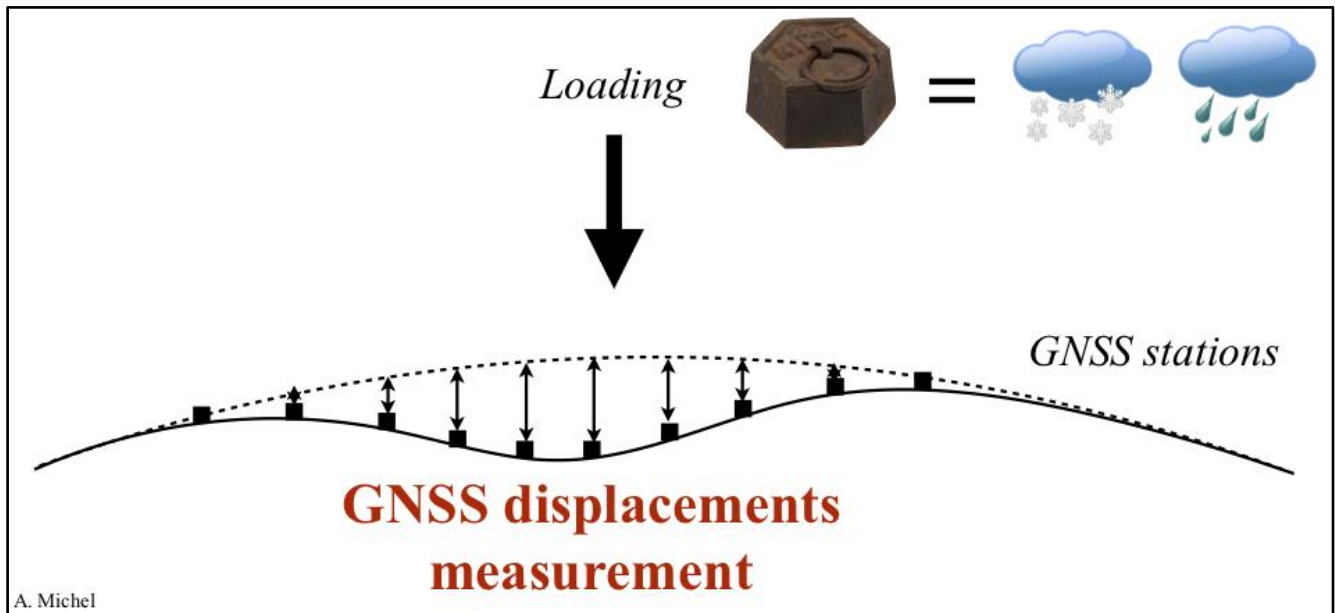


*Deep seated gravitational slope deformation in the alpine mountains*

|                                                                                                                                  |                                            |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| 10:40 to 10:55                                                                                                                   | Luc MOUTOTE (IPGS/ITES)                    |
| Low significance of foreshock activity in Southern California                                                                    |                                            |
| 11:00 to 11:15                                                                                                                   | Emmanuel CABALLEROLEYVA (IPGS/ITES)        |
| Insight on rupture dynamics from probabilistic fault models of the 2014 Iquique                                                  |                                            |
| 11:20 to 11:35                                                                                                                   | Lucille CARBILLET (IPGS/ITES)              |
| Cooking synthetic rocks in the laboratory: preparing “sandstones” with known microstructural attributes                          |                                            |
| 11:40 to 11:55                                                                                                                   | Peng CHAO (IPGS/ITES)                      |
| The tectono-stratigraphic and magmatic evolution of conjugate rifted margins: insights from the NW South China Sea               |                                            |
| 12:00 to 12:15                                                                                                                   | Thifhelimbilu faith MULABISANA (IPGS/ITES) |
| Active Tectonics, Crustal Deformation and Seismotectonic background for a realistic Seismic Hazard Assessment in southern Africa |                                            |



Near-surface hydrology: from the lab to the global scale (the 2nd of February, from 13:30 to 15:30)



*Displacement of the ground in response to hydrological loading*

|                                                                                                                                       |                                          |
|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| 13:30 to 13:45                                                                                                                        | Minghe ZHANG (IPGS/ITES)                 |
| Modeling and Inversion of GPR Signals for Estimating Hydraulic Properties of Unsaturated Sandy Soils                                  |                                          |
| 13:50 to 14:05                                                                                                                        | Hugo LECOMTE (IPGS/ITES)                 |
| Study of the accuracy of GRACE products                                                                                               |                                          |
| 14:10 to 14:25                                                                                                                        | Alexandre MICHEL (IPGS/ITES)             |
| Surface seasonal deformations in western Europe computed from a massive GNSS processing of a global network with the GINS/PC software |                                          |
| 14:30 to 14:45                                                                                                                        | Quentin CHAFFAUT (IPGS/ITES)             |
| Time-lapse gravimetry as a tool to calibrate a physically based distributed hydrological model                                        |                                          |
| 14:50 to 15:05                                                                                                                        | Daniel Steven MORENOMARTIN (LHyGeS/ITES) |
| Hydrodynamic and thermodynamic simulation in the Strengbach catchment                                                                 |                                          |
| 15:10 to 15:25                                                                                                                        | Mouna Chaguer (LHyGeS/ITES)              |
| Development of the integrated hydrological model NIHM: Implementation of transport processes                                          |                                          |

Anthropogenic impact on the environment: make landscape, air and water quality great again! (the 2nd of February, from 15:30 to 17:00)



*The old Rhine, nearby Fessenheim*

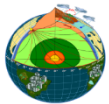
|                                                                                                                                               |                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| 15:30 to 15:45                                                                                                                                | Marcoandres GUEVERALUNA (LIVE)              |
| Analysis of energy transition in the Trinational Metropolitan Region Oberrhein region                                                         |                                             |
| 15:50 to 16:05                                                                                                                                | Mariadelourdes PRIETOESPINOZA (LHyGeS/ITES) |
| Reactive transport of dichloromethane and micropollutants in laboratory aquifers: an integrative approach                                     |                                             |
| 16:10 to 16:25                                                                                                                                | Benjamin KELLER (LIVE)                      |
| Geohistory and geoarchaeology of agrarian landscapes in Grand Est : Shapes, plots and territories                                             |                                             |
| 16:30 to 16:45                                                                                                                                | Caline LY KENG (LIVE)                       |
| Industrial releases and its impact on the Upper Rhine river: geo-history and legal approaches                                                 |                                             |
| 16:50 to 17:05                                                                                                                                | Angela OSORIO (LIVE)                        |
| Management and ecological restoration of the protected areas of the "Bande rhénane": construction of a participatory and adaptive methodology |                                             |

## Poster day (the 9<sup>th</sup> of February, morning only)

Poster presentations will take place remotely on the BigBlueButton platform in the morning of the 9<sup>th</sup> of February. It consists in two consecutive sessions merging all the thematic.

Please find below the connection link to the main congress room:

### [Link to the Congress room](#)



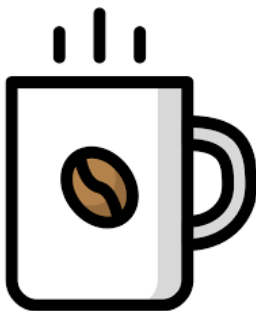
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For helping attendees to prepare question about the work of their colleague, poster together with a small presenting soundtrack will be made available two days in advance on the congress [website](#).



Each presenter will have his own virtual room on the BigBlueButton platform, the link is already available (please see the detailed program in the next pages). You will need to be ready for any questions from visitors and be present throughout the session (About 1h30). If you have any question you will find somebody in the [main congress room](#).

## Opening of the day (the 9<sup>th</sup> of February, from 8:45 to 9:00)



Rendez-vous to the [main congress room](#) for the welcoming speech, and for drinking a coffee together!

## Session 1 (the 9th of February, from 9:00 to 10:30)

|                                                                                                                                 |                                   |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| 9:00 to 10:30                                                                                                                   | Sara TABRIZINEJADAS (LHyGeS/ITES) |
| Improvements in Reactive Transport Models for electro diffusion process in porous media based on Nernst-Planck-Poisson Equation |                                   |
| <a href="#">BBB link</a>                                                                                                        |                                   |

|                                             |                                  |
|---------------------------------------------|----------------------------------|
| 9:00 to 10:30                               | Monica AQUINO GUERRA (IPGS/ITES) |
| Joint Inversion of Passive Geophysical Data |                                  |
| <a href="#">BBB link</a>                    |                                  |

|                                                                                            |                          |
|--------------------------------------------------------------------------------------------|--------------------------|
| 9:00 to 10:30                                                                              | Qinglin DENG (IPGS/ITES) |
| Anisotropy of hydraulic diffusivity due to fracture surface roughness and fracture closure |                          |
| <a href="#">BBB link</a>                                                                   |                          |

|                                                                                                                                                                    |                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| 9:00 to 10:30                                                                                                                                                      | Virginie HAMANN (LIVE) |
| The role of the living environment in the social inequalities in the physical activities of pregnant women residing in the eurometropole of Strasbourg – (ENVIFEM) |                        |
| <a href="#">BBB link</a>                                                                                                                                           |                        |

|                          |                    |
|--------------------------|--------------------|
| 9:00 to 10:30            | John VILLAR (LIVE) |
| Desirable Cities         |                    |
| <a href="#">BBB link</a> |                    |

|                                                                                                                  |                        |
|------------------------------------------------------------------------------------------------------------------|------------------------|
| 9:00 to 10:30                                                                                                    | Cassandra EUZEN (LIVE) |
| Anthropogenic trajectory in the Upper Rhine through the dynamics and the composition of the sedimentary deposits |                        |
| <a href="#">BBB link</a>                                                                                         |                        |

|                                                                                         |                                   |
|-----------------------------------------------------------------------------------------|-----------------------------------|
| 9:00 to 10:30                                                                           | Samirasadat SOLTANI (LHyGeS/ITES) |
| Estimation of groundwater storage using assimilating GRACE TWSA into hydrological model |                                   |
| <a href="#">BBB link</a>                                                                |                                   |

|                                                                  |                                    |
|------------------------------------------------------------------|------------------------------------|
| 9:00 to 10:30                                                    | Bashayer AL-SHAMMARI (LHyGeS/ITES) |
| Modeling of seawater intrusion in coastal aquifer at Kuwait city |                                    |
| <a href="#">BBB link</a>                                         |                                    |



## Session 2 (the 9th of February, from 10:45 to 12:15)

|                                                                                                                                            |                                |
|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| 10:45 to 12:15                                                                                                                             | Valentin SIMONCIC (LIVE)       |
| Adverse Birth Outcomes Related to NO <sub>2</sub> and PM Exposure                                                                          |                                |
| <a href="#">BBB link</a>                                                                                                                   |                                |
| 10:45 to 12:15                                                                                                                             | Quentin POTEREK (LIVE)         |
| Unprecedented and ancient spatial data for assessing the effect of past changes on current floristic biodiversity                          |                                |
| <a href="#">BBB link</a>                                                                                                                   |                                |
| 10:45 to 12:15                                                                                                                             | Romain WENGER (LIVE)           |
| U-Net for multi-class classification using imbalanced dataset: Application on urban areas in Grand Est                                     |                                |
| <a href="#">BBB link</a>                                                                                                                   |                                |
| 10:45 to 12:15                                                                                                                             | Kamel DRIF (IPGS/ITES)         |
| Source parameters of the M3.0 Strasbourg Earthquake                                                                                        |                                |
| <a href="#">BBB link</a>                                                                                                                   |                                |
| 10:45 to 12:15                                                                                                                             | Tobias JUNGINGER (LHyGeS/ITES) |
| Leaching and transformation of the urban triazine biocide terbutryn: insights from Compound-Specific Isotope Analysis                      |                                |
| <a href="#">BBB link</a>                                                                                                                   |                                |
| 10:45 to 12:15                                                                                                                             | Nicolas MERCURY (IPGS/ITES)    |
| The 2018-2020 seismo-volcanic crisis, east of Mayotte, Comoros islands: in-depth study of poorly instrumented first months of the sequence |                                |
| <a href="#">BBB link</a>                                                                                                                   |                                |
| 10:45 to 12:15                                                                                                                             | Franck LATALLERIE (IPGS/ITES)  |
| Resolution and Uncertainties of Tomographic Models for Quantitative Analysis: A Surface Wave Example From the Pacific                      |                                |
| <a href="#">BBB link</a>                                                                                                                   |                                |
| 10:45 to 12:15                                                                                                                             | Rohianuu MOUA (IPGS/ITES)      |
| Parametrization of hydrogeological models using geophysical methods                                                                        |                                |
| <a href="#">BBB link</a>                                                                                                                   |                                |

|                                                                                                                                                                         |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 10:45 to 12:15                                                                                                                                                          | Clément BOIVIN (IPGS/ITES) |
| Long and short-time evolution of deep-seated gravitational slope deformation: contribution to knowledge of phenomena for the management of alea in the alpine mountains |                            |
| <a href="#">BBB link</a>                                                                                                                                                |                            |

Award announcement (the 9th of February, from 12:20 to 12:40)

## Framadate



Vote for the best poster of the congress!



[best poster election](#)

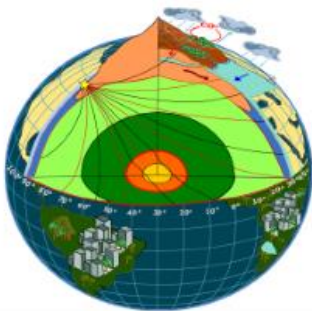
## Framadate



Vote for the best talk of the congress!



[best talk election](#)



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