

# Kick-off meeting of GEM3 associate team

July 8, 2025

9:00-9:05/14:00-14:05 Welcome

## Scientific Sessions

### Session 1 (Inria Project Team GALETS)

9:05-9:20/14:05-14:20 Roland Masson

*“Fault Reactivation Models and Discretization”*

9:20-9:35/14:20-14:35 Konstantin Brenner

*“Trefftz Method for Linear and Nonlinear Elliptic PDEs in Irregular Domains”*

9:35-9:50/14:35-14:50 Alessandra Marelli

*“Advanced nonlinear preconditioning techniques for the resolution of nonlinear problems in geoscience”*

9:50-10:20/14:50-15:20 Free-time for discussions

### Session 2 (LNCC: IPES and COMOD Team)

10:30-10:45/15:30-15:45 Marcio Murad

*“Linking Scales in Porous Media: Advances in Multiscale Modeling for Geoscience Challenges”*

10:45-11:00/15:45-16:00 Frederic Valentin

*“Multiscale Finite Element Methods for Fluids”*

11:00-11:15/16:00-16:15 Larissa Martins

*“Development of Post-Processing Techniques for the MHM method Applied to Elliptic Models”*

11:15-11:30/16:15-16:30 Tadeu Gomes

*“The MHM Set of Libraries (MSL): Design and Parallel Implementation”*

11:30-12:00/16:30-17:00 Free-time for discussions