

Cassini Hydrogen Workshop Program - 25th May 2023

- 9:00-9:30 Registration
9:30-10:00 Welcome and overview of the program

1st session: Natural hydrogen as a key resource for the future (Chair Giuseppina Anzelmo)

- 10-10:45 Isabelle Moretti (Université de Pau et des Pays de l'Adour, France)
Natural H₂ : the exploration started, where and by who?
- 10:45-11 Martina Cascone (Università di Napoli Federico II, Italy)
Microbial hydrogenase diversity and distribution in natural hydrogen springs
- 11-11:30 *Coffee break*
- 11:30-11:45 Dan LEVY (IPGP, France)
Hydrogen clumped isotopes and the origin of H₂
- 11:45-12:00 Guillaume Siron (Università di Bologna, Italy)
Investigating the complexity of high-pressure hydrogen production using thermodynamic modeling of fluid-rock interactions
- 12:00-12:15 Orlando Sébastien Olivieri (Università di Bologna, Italy)
Orogenic peridotites store natural H₂ in fluid inclusions over geological time scales: the Monte Maggiore (Corsica, France) case study
- 12:15-12:30 Nunzia Esercizio (CNR-Istituto di Chimica Biomolecolare, Italy)
*Bio-hydrogen from *Thermotoga neapolitana**
- 12:30-13:00 Alberto Vitale Brovarone (Università di Bologna, Italy))
Università di Bologna Extreme H₂ from the deepest roots of serpentinization, at convergent margins
- 13:00-14.30 *Lunch break*

2nd session: Underground hydrogen storage (Chair Martina Cascone)

- 14:30-15:15 David Iacopini (Università di Napoli Federico II, Italy)
Safe underground Hydrogen storage IN porous subsurface rEservoirs (SHINE): a new European interdisciplinary project exploring the hydrogen interaction with porous reservoir
- 15:15-15:30 Giusy Anzelmo (Università di Napoli Federico II, Italy)
Exploring the Messinian evaporating unit across the Italian territory for potential hydrogen storage sites
- 15:30-15:45 Gabriella Gallo (Università di Napoli Federico II, Italy)
Underground Hydrogen Storage on a small scale: a microcosm experiment
- 15:45-16 Maria Portarapillo (Università di Napoli Federico II, Italy)
CFD-based risk assessment of Underground Hydrogen Storage
- 16-16:30 *Open Discussion*
- 16:30 *End of the Cassini Hydrogen Workshop*