

# PC 9 – Geothermal Energy Rhine Graben

## WP0 - Transversal actions (J. Schmittbuhl/B. Sanjuan)

- **Task 1:** Project coordination (PC1)
- **Task 2:** Preparation of the scientific program for the drilling of scientific wells (ICDP)
- **Task 3:** Convention for the monitoring of the geothermal sites (PC2,8)
- **Task 4:** Database of the project and GEORG upgrading (PC4)



## WP1 - Characterization of the spatial heterogeneities of the reservoirs in the Rhine Graben: needs of deep scientific geothermal wells (G. Manatschal)

- **Task 1:** Variability of the fractured and porous reservoirs associated with the basement-sedimentary cover - J. Mercadier (PC4)
- **Task 2:** Identification of new reservoirs in the sedimentary cover - M. Schuster (PC4)
- **Task 3:** Characterisation of the active deformation of the Rhine Graben - B. Rousset



## WP2 - Exploitation of the resources of the Rhine Graben: needs of an imagery of the deep fluid circulations (Ch. Dezayes)

- **Task 1 :** Upgrade of the GEORG geological model of the Rhine Graben: comparable resolution of geophysical techniques - M. Darnet (PC4)
- **Task 2:** Development of artificial Intelligence methods for quantitative characterisation and forecasting of deep fluid circulation - R. Chassagne (PC4)
- **Task 3:** Development of 3D dynamic numerical models to highlight the control of the basement roof morphology on the existence and location of hot fluid upwelling - D. Bruel (PC4)
- **Task 4:** Origin and distribution of the Lithium resources - C. Lerouge (PC3, PC4, PC6)
- **Task 5:** Processes of Hydrogen and Helium generation and migration - L. Truche (PC4)



## WP3 - From the “acceptability” to the “Research and Responsible Innovation” (RRI) of the deep geothermal energy: the Strasbourg demonstrator (Ph. Chavot)

- **Task 1:** Public images of the subsoil and deep geothermal projects: media study and questionnaire survey on public perception and subsoil uses (PC4)
- **Task 2:** Reshaping seismic monitoring and data sharing through participatory science (PC7)
- **Task 3:** Analysis of the socio-technical negotiations of deep geothermal projects: what conditions for a RRI? (PC2,3,7)

Overview of the structure of the ‘PC9 - Fossé Rhéнан’ project.

The coordinating workpackage WP0 will insure interactions with the PEPR ‘Sous-sol, bien commun’ governance and promote transverse actions. Each of the three core workpackages will address one of the identified key issues of present EGS deep geothermal sector development. In red, the expected link with other targeted projects (PC).