

## Reduction of conservatism in the design of buried pipelines in service conditions using experimental and numerical approaches

**Supervision:** Fabrice EMERIAULT Orianne JENCK

Christophe DANO Antoine MERTZ

Ali AJAMI
PhD (2023-2026)
ali.ajami@univ-grenoble-alpes.fr

## **Experimental investigation**

- ✓ Confirm vertical stress distribution.
- ✓ Investigate pressurized vs. non-pressurized pipeline behavior.



## **Numerical modelling**

- ✓ Develop numerical model at reduced scale using FLAC2D-3D
- ✓ Compare simulations with experimental results.



## **Integration into RAMCES**

✓ Implement recommendations into RAMCES.

Funding: GRTgaz

✓ Validate through new experiments and simulations.













