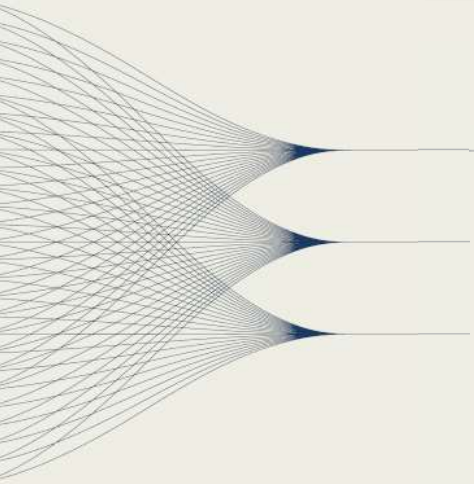




Afra Abdelrahman Mohammed Bakhit

P2.3-820



- Research Focus: Can radon gas help detect underground nuclear explosions (UNEs)?
- We simulate radon movement through soil under both passive and pressurized subsurface conditions.
- Key Results: Diffusion-only: Radon decays rapidly with height
- With Darcy Flow: Pressure boosts radon migration to the surface
- ✓ Results match published benchmarks (Burnett et al., 2021)
- Why It Matters: 💡 Validates CFD as a tool for interpreting radon anomalies 🗑 Supports CTBTO's global verification mission
- Visit Me: 📍 Poster #51 📄 10 Sept, 10:00 📍 Zeremoniensaal

