Radon @ IN2P3

- Rn-sensitive experiments : SuperNEMO, Dark Side, JUNO, DUNE, CUPID, XENON, DAMIC, ….

- Labs involved in low radioactivity Rn measurements:
  - LP2I-Bx : 700 L emanation chamber + high sensitivity Rn detector (SN)
    => SuperNEMO, JUNO, …
  - CPPM : radon adsorption in porous materials
    => Carbon base adsorbents (optimum porosity)

- 2020 : MicroRadon master projet : CPPM, LP2I, IPHC (3 years)
  "*study the fundamental mechanisms of radon background under special experimental conditions. Develop new materials and capture techniques*"
    => Preliminary studies on
      - Rn emanation in Xe , Ar, He
      - Rn emanation in liquid v.s. gaz phase (Xe)
      - Rn adsorption in Ag-zeolite (Rn adsorption 100 > Carboact)
      - Rn emanation in water
      - Rn adsorption selectivity in Xe (Macromolecular cages)
      - BiPo potable radon detector for hydrogeology
      - etc

- 2023 : in2p3 asks me to consider the possibility to create a permanent platform for radon studies (A. Lucotte, V. Poireau, R. Clèdassou)