# Low gamma activity measurement of meteorites using HPGe-NaI detector system

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The radioactivity in natural samples like cosmogenic isotopes in meteorites is very low, usually **below 0.001 dpm/g**.

Special techniques are required as

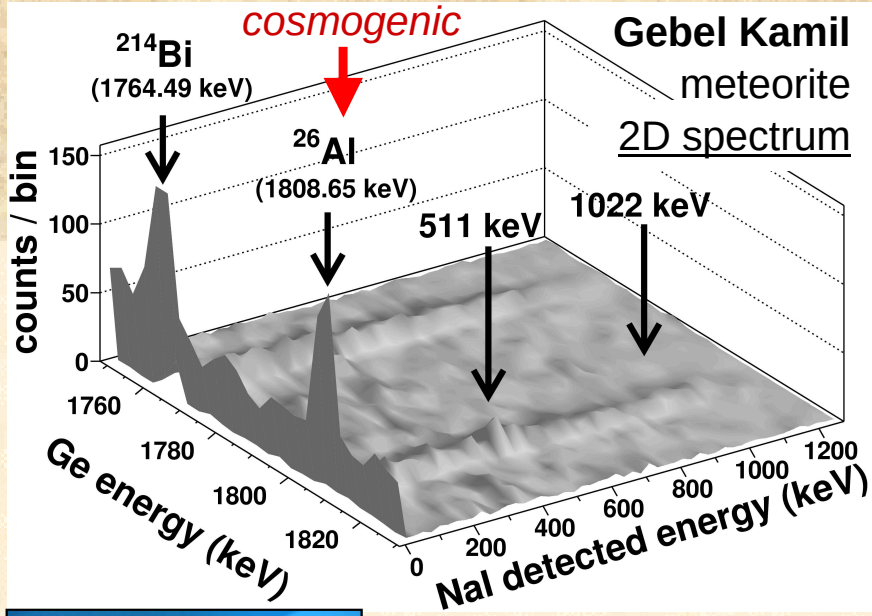
- the sample can not be destroyed
- large amount of sample must be counted

We have developed a highly selective **Ge-NaI coincidence spectrometer**, operating in the **underground** Laboratory of Monte dei Cappuccini (INAF) in Torino.

**HPGe** inside
**NaI(Tl)** "umbrella"

"plug" to complete $4\pi$ geometry

We have then developed a **multiparametric** acquisition system → better selectivity




*iron* meteorite

**Applications** to the study of *chondrite*, *achondrite* and *iron* meteorites are described.