

Seminario

Dipartimento di Fisica e Scienze della Terra, Blocco C – Aula C412

21 Giugno 2019 ore 11:00

**Experiences and Challenges in three decades of
Airborne Gamma Spectrometry in Switzerland**



Dott. Benno Bucher

Ispettorato Federale della Sicurezza Nucleare (ENSI) della Svizzera

In Switzerland Airborne Gamma-Ray Spectrometry (AGRS) started in the year 1986 by a geological mapping project of the Swiss central massifs. During this project the data processing method and software was developed and the major part of the central Alps were measured. Mandated by the Nuclear Safety Authority, measurements in the environs of all Swiss nuclear power plants started 1989. After building new measurement systems in the early 1990s, the AGRS became part of the radioactivity emergency organization of the Federal office for public protection in 1994. Since then, one week measurement exercises for training are taking place yearly, still measuring the environs of nuclear installation in a biannual period. In context with the EURO08 hold in Austria and Switzerland, the host cities in Switzerland were measured by airborne gamma spectrometry in 2008.

International collaboration started already in 1995 in a common exercise with French colleagues, followed by an exercise with Austria in 1997 and Germany in 1999. At the same time an EU project was aiming to improve the collaboration within Europe, ending with a huge common exercise in Scotland. Since then, smaller exercises together with countries of central Europe were hold regularly in Germany and Switzerland.

In a time frame of 30 years, it is quite challenging to keep a sophisticated system running, to assure the readiness of the system all the time, to keep the military measurement team well trained and able to do the job. Out in the field there are many chances for experiences, mistakes, challenges and success.