

Fakultät für Physik

Isotopenforschung und Kernphysik

E I N L A D U N G zum V E R A - S E M I N A R

von

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Measurements of ¹³⁷Cs, uranium and plutonium isotopes in river sediments: looking for a possible contamination by the Garigliano Nuclear Power Plant

The oldest among the Italian Nuclear Power Plants, the Garigliano NPP was shut down in 1976. It is now in the decommissioning phase. Despite its short operating life (12 years), it offers an interesting study case to assess a possible contamination of the neighbouring environment with uranium and plutonium isotopes and fission products from a Boiling Water Nuclear Reactor. In particular, we have focused our attention on the measurement of possible leaks of uranium and plutonium isotopes and ¹³⁷Cs from liquid emissions into the Garigliano river. The choice of AMS as the most sensitive method allows the measurement of Uranium and Plutonium isotopic ratios, which are a signature of the nature of the contamination source.

Donnerstag, 10. Mai 2007, 14 Uhr c.t.

1090 Wien, Währinger Str. 17, "Kavalierstrakt", 1. Stock, Seminarraum von VERA

R. Golser

W. Kutschera