

# GSI - SEMINAR

Im Theorieseminarraum, SB3 Raum 3.170a

Darmstadt, Planckstraße 1

Donnerstag, den 3. Dezember 2015, 14:00 Uhr

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## *“Americium-241 irradiation setup for cell monolayers at GSI”*

In the context of the GREWIS project the biological effects and the genetically risks caused by  $\alpha$ -radiation are investigated. For cell irradiation, a setup was designed, with which it is possible to expose the samples to  $\alpha$ -particles, emitted by an Am-241 source under reproducible conditions. In this talk the specifications and details of this setup will be explained.

In order to get reliable results, the knowledge of the applied dose is absolutely necessary. The performed measurements, including  $\alpha$ -spectroscopy and CR-39 dosimetry, will be shown, as well as the resulting dose rate. Furthermore the sample preparation will be presented to the potential user of this irradiation setup, including the prevention of possible mistakes and influences on the dose rate.

Einladender: Prof. Dr. Gerhard Kraft

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