

**MEASUREMENT OF THE ROT-EFFECT IN FISSION OF ^{235}U
INDUCED BY MONOCHROMATIC COLD POLARIZED
NEUTRONS WITH AN ENERGY OF 60 MeV**

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An experiment studying T -odd effects in binary fission of ^{235}U induced by monochromatic cold polarized neutrons was performed at the POLI instrument of the FRM2 reactor in Garching. In particular, triple correlations between the spin of the incoming neutrons and the emission directions of fission fragments and prompt γ -rays/neutrons were investigated. The neutrons were polarized using ultra compact SEOP (Spin Exchange Optical Pumping) based ^3He polarized. The anisotropy parameter A determined from the experimental data for prompt gamma-rays and neutrons was established at the level of 10^{-4} . In spite of the smallness of the effects, the results are in agreement with the most modern theoretical model prediction.

The details of the experimental setup on beamline POLI, as well as the results of the experiment and the future plans will be presented.