## Annual meeting of the Swiss Physical Society 2018



Contribution ID: 46

Type: Poster

## [376] Monte Carlo Simulations for the Mott Calibrations of the MEGII Spectrometer

Wednesday 29 August 2018 18:35 (1 minute)

The motivation for the use of Mott scattered positrons will be shown: By correctly tuning the positron beam, the scattered positrons have similar properties as the expected signal. Thus, they are suitable candidates to fake a signal event in the MEGII Spectrometer to fully characterise the detector response and to extract the positron's probability density functions used for the search of a  $\mu \rightarrow e\gamma$  event.

There are still minor deviations due to momentum spread of the initial beam or the details of the Mott scattering process. These deviations can be taken care of by the so called double turn algorithm discussed as well.

 Authors:
 SCHWENDIMANN, Patrick (for the MEGII collaboration); MEGII COLLABORATION (MEGII)

 Presenter:
 SCHWENDIMANN, Patrick (for the MEGII collaboration)

 Session Classification:
 Poster Session

Track Classification: Nuclear, Particle- and Astrophysics (TASK)