



Contribution ID: 13

Type: Oral

External magnetic fields - mapping, monitoring and shielding

Thursday, 19 October 2017 09:00 (25 minutes)

A measurement of the neutron electric dipole moment requires the magnetic field to be stable on a picotesla level. Yet in a typical experimental hall there are strong sources of magnetic field, nemeses of precise nEDM measurements. A large-scale mapping, performed prior to the installation of the apparatus, can resolve the spatial distribution of the field. During the nEDM measurement the magnetic field in the hall can be monitored, providing on-line and historic information on its variation. Finally, an active magnetic field shielding system can efficiently shield against those, typically, strong and slow disturbance.

Email

mrawlik@phys.ethz.ch

Consider for Poster

No

Primary author: Mr RAWLIK, Michał (ETH Zürich)

Presenter: Mr RAWLIK, Michał (ETH Zürich)

Session Classification: ThMo1

Track Classification: Magnetic field control (passive and active shielding, coil design, current sources)