

Seminarium Astrofizyczne
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Jest to wykład, który został odwołany 27.11

Maciej Górski

(NCBJ)

The search for Dark Matter using Paleodetectors

The search for DM candidates continues since many years using various types of detectors. Up to now no positive results were obtained with exception of (rather unsure) ones obtained by the DAMA-LIBRA experiment.

We propose to use tracks created in various mineral crystals due to scattering of DM particles on nuclei. This method allows to increase sensitivity in certain ranges of DM candidates mass, specially for low masses (below ~ 15 GeV) and high masses (above 500 GeV). The minerals were illuminated by DM flux for periods up to say 1 billion years, which even for small sample masses should provide better limits than currently available ones, or, maybe would lead to a discovery.

I will shortly present current results and the new search method, specially stressing various background sources.

Serdecznie zapraszam,
Agnieszka Majczyna