FAKULTÄT FÜR PHYSIK
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EINLADUNG

zur

V E R A - D I S K U S S I O N S R U N D E

von

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zum Thema

The half-life of ^{32}Si

Measurements made of the half-life of ^{32}Si over the past four decades using a variety of techniques are highly scattered [1]. Even though the scatter is less in the more recent measurements, the half-life is still not known sufficiently. Despite difficulty in measurement, indicated half-lifes of about 100 years made ^{32}Si a potentially very attractive tool in geochronology for the study of anthropogenic impacts.

All of these half-life measurement methods have their problems, reflected in the scatter of the results. We have now, in collaboration with ANU, for the first time measured the ^{32}Si decay directly in a robustly dated Antarctic ice core covering the last 1,000 years, using the highly sensitive AMS technique. The results indicate a significantly lower half-life of ^{32}Si.

[1] L.K. Fifield, L.K., U. Morgenstern, Silicon-32 as a tool for dating the recent past, Quaternary Geochronology 4 (2009) 400-405. doi:10.1016/j.quageo.2008.12.006

Hörsaal wurde geändert !

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1090 Wien, Währinger Str. 17, „Kavalierstrakt“
1. Stock, Victor-Franz-Hess HS