



Einladung zum Vortrag

“Traces of solar storms in ice cores”

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Termin: Freitag, 11.03.2022, 15:30 Uhr, Lehrprobe 16:00 Uhr

Online:

https://univienne.zoom.us/j/67339599683?pwd=RVpyY2J6VXdoQWk0N3VBa3BZRm_xMQT09

Meeting ID: 673 3959 9683

Kenncode: 341713

Abstract:

The recent loss of 40 Starlink satellites to a solar storm highlights that our society has grown particularly vulnerable to these events. Yet, our assessment of their recurrence and maximum intensity is limited in time to about the past 70 years. To extend our perspective and thereby knowledge on solar storms, we can rely on cosmogenic radionuclides that are generated as the byproduct of the interactions between solar and galactic cosmic rays with atmospheric constituents. Upon production in the atmosphere, radionuclides are scavenged to the ground and can thus be locked in environmental archives for us to unravel, such as in annual layers of ice cores. Here I will present how employing accelerator mass spectrometry can enable us to “scan” ice cores to search for ancient extreme solar storms.

Im Rahmen des Vortrages findet eine Lehrprobe zum Thema
„Accelerators for Nuclear Physics“ statt.