



E I N L A D U N G

zum

V E R A - S E M I N A R

von

Michael Dee

Centre for Isotope Research, University of Groningen

The Positives (and Negatives) of Proton Storms

In the years 775 and 994 AD, major pulses of radiation struck the Earth, probably as a result of intense solar proton storms. The impacts caused the production of radiocarbon in the atmosphere to spike dramatically. The dates of the events are precisely known because the uplifts in radiocarbon were found in tree-rings of known growth year. Many more such tree-rings are now being tested to determine the regularity of the events, especially as a recurrence in modern times would be devastating for satellite and telecommunication systems. But the spikes in radiocarbon concentration also present a new opportunity for resolving the age of ancient civilisations, such as the Maya and the Egyptians. A new project aims to find the known-age spikes in archaeological artefacts, thus allowing them to be dated to the exact calendar year. Further projects are also being developed which are aimed at determining the exact mechanism and propagation of these intense radiation events.

Donnerstag, 26. Januar 2017, 16:30 Uhr

**1090 Wien, Währinger Str. 17, "Kavalierstrakt",
1. Stock, Victor-Franz-Hess-Hörsaal**