

## Fakultät für Physik

Isotopenphysik

INVITATION
for a

VERA-SEMINAR
with

## **Andy CUNDY**

GAU-Radioanalytical Laboratories, University of Southampton, U.K.

## **Nuclear Fingerprints of the Anthropocene**

The detonation of the Trinity atomic device on July 16, 1945 marked a new era in the world's geopolitics - The Atomic or Nuclear Age. Subsequent nuclear detonations globally distributed a suite of radioactive fallout products which have been captured in the Earth's sediments, soils, ice, and biological structures such as corals, trees, and skeletons, fingerprinting the mid-twentieth century in our geological record. This talk presents and assesses work by the Anthropocene Working Group (AWG) and partner organisations comparing the records of nuclear fallout (bomb radiocarbon, the various isotopes of plutonium, and other fallout-derived radionuclides) and other physical, chemical and biological indicators of human activity in recent geological materials across the globe, culminating in the recent proposal to establish a GSSP (a Global Boundary Stratotype Section and Point) for a new geological Anthropocene epoch at Crawford Lake (Canada).

Thursday, 19.10.2023, 16:30 o'clock

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