



universität  
wien

Fakultät für Mathematik

## Mathematisches Kolloquium gemeinsam mit dem Kolloquium des Wolfgang Pauli Instituts

Mittwoch, 07. Juni 2023  
Sky Lounge

### EINLADUNG

Uriel Frisch  
(CNRS)

„Fusion: past and future of an energy source“

### „Fusion: past and future of an energy source“

#### **Abstract:**

*We deal with the question to which extent a recent widely published breakthrough in laser fusion at the Lawrence Livermore Laboratory brings us closer to sustained energy production by nuclear fusion. This week at the WPI we are running a workshop on this question, with focus on „Inertial Confinement Fusion“, and this talk is intended to explain the mechanisms and the history of nuclear fusion to a broader audience.*

*In December 2018, Diamond, Frisch and Pomeau published in "European Physical Journal (History)" a history of plasma physics in the 20th century including the "prehistory of plasma physics". Fusion did not start in the early fifties: already in the 19th century William Prout and Charles Darwin made key observations. In the early 20th century, Paul Langevin and Jean Perrin observed that Einstein's equivalence between mass and energy has important consequences for fusion energy.*

*This was before Arthur Edington well-known observations on the solar energy "If indeed, the sub-atomic energy in the stars is being freely used to maintain their great furnaces, it seems to bring a little nearer to fulfilment our dream of controlling this latent power of the well-being of the human race - or for its suicide."*

**14:45 Uhr: Kaffeejause**

**15:15 Uhr: Vortrag**

**Vinum cum pane im Anschluss**

Norbert Mauser  
Radu Ioan Boț