

Physics Colloquium Mainz

April 16, 2024 at 16 c.t.

Lecture room KPH,
Johann-Joachim-Becher-Weg 45, JGU

In times of a shift towards a low CO₂ energy supply and boosted by the recent success of laser fusion, the advantages of nuclear fusion in general have come into the focus of politics and private investors as an attractive energy source. This talk introduces the concept of magnetic fusion and outlines the path to a fusion reactor. The perspectives of magnetic fusion will be compared with those of laser fusion and the concepts of startups. The role of plasmas, in which energy is obtained from the fusion of hydrogen isotopes, and their physical properties are explained.

**A Sun on Earth: Nuclear Fusion as a
CO₂-Free Energy Source**

Prof. Dr. Ulrich Stroth

**Max Planck Institute for Plasma Physics,
Garching**

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