



MEGHÍVÓ

AKADÉMIAI SZÉKFOGLALÓRA

A MAGYAR TUDOMÁNYOS AKADÉMIA
FIZIKAI TUDOMÁNYOK OSZTÁLYA

tisztelettel meghívja Önt

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az MTA tiszteleti tagja

**Modern Paths to Nuclear Fusion Energy:
Elementary particles, Lasers, Nano-structures**

címmel tartandó székház előadására

Az előadás ideje: 2022. június 13. (hétfő) 15.00 óra

Az előadás helyszíne: MTA Székház, Nagyterem
(1051 Budapest, Széchenyi István tér 9. II. emelet)

Az előadás kivonata:

Nuclear fusion energy powers the Sun. The possibility of limitless fusion energy on Earth has stimulated a widespread research effort to harness this abundantly available and potentially non-radioactive source of nuclear energy. However, the 0-generation plasma fusion reactor under construction is based on nuclear-weapon tritium cycle. My personal research interests are therefore today focused on fusion concepts that sidestep extreme density and temperature matter conditions required in the thermal equilibrium plasma devices, and the production of weapons-grade neutrons. I will introduce: Muon catalyzed cold nuclear fusion (not to be confounded with cold [con-]fusion); Laser driven proton acceleration induced micro-explosion fusion; and laser driven dynamical plasmon fusion. All three approaches are under active study, funded by both private and government sponsored research programs.

