



ORTVAY KOLLOKVIUM // Ortway Seminar Series

2017. február 23. csütörtök 16:00-kor
23rd February 2017., Thursday 4pm

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Radio detection: a new observation technique to investigate the Ultra-High-Energy Cosmic Ray mysteries

Abstract:

Ultra-High-Energy Cosmic Rays (UHECRs) have been found with energies as high as 10^{20} eV in a single subatomic particle. The 3000 km² Pierre Auger Observatory has collected data over the past 15 years that confirmed a predicted cut-off at ultra-high energy. However, it also introduced new mysteries surrounding these UHECRs. At this moment we must admit that we do not know their sources, their propagate through the universe, or even their particle type is.

The detection of UHECRs using the radio frequency signals they produce in the atmosphere, which was developed over the last decade, is a new and powerful tool to solve the current mysteries surrounding UHECRs. In this talk I will introduce the open questions on UHECRs and discuss the mechanism, status and prospects for radio detection of UHECRs.

Minden érdeklődőt szívesen látunk! Az előadás előtt negyed órával az előadóban teát szolgálunk fel.

All visitors are welcome. Tea and biscuits are served 15 min prior the lectures at the location.

Helyszín: ELTE Pázmány Péter s. 1/A alatti épületében a földszinti 0.81 (Ortway) terem.

Location Lágymányos Eötvös Campus (address: Pázmány Péter s. 1/A), Northern Building, Room Ortway (0.81).

Az előadás-sorozatról az interneten az "ortvay-koll.elte.hu" címen található információ.

Further information available at the "ortvay-koll.elte.hu" website.