

Tuesday

Feb. 27th

At 3:45pm



New Frontiers in Ion Beam Trapping

Abstract:

Ion traps and ion storage rings are two well-known devices intensely used in nuclear physics, in the study of fundamental interactions and more. About 20 years ago, we introduced a hybrid version of the two devices, namely trapping ions as a beam in an electrostatic device (electrostatic ion beam trap – EIBT). The advantages include the small size (tabletop), no mass limit with the same tuning, field free region for experiments inside the trap, ion production in an external ion source and more. In this talk, a short introduction to the EIBT device will be given. New directions for ion cooling via autoresonance will be presented as well as a recent progress on the application of the EIBT with a radioactive beam of ${}^6\text{He}$ for tests of the standard model.

**CYCLOTRON
COLLOQUIUM**

Dr. Oded Heber

Staff Scientist

**Weizmann
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Room 228

Refreshments will be
served at 3:30pm



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