



ID contributo: 290

Tipo: **Poster**

## **BULLKID - Bulky and low-threshold kinetic inductance detectors**

*giovedì 25 luglio 2019 18:45 (15 minuti)*

BULLKID is an R&D project on a new cryogenic particle detector to search for rare low energy processes such as low-mass dark matter and neutrino coherent scattering off nuclei. The detector unit we are designing consists in an array of around 100 silicon absorbers sensed by phonon-mediated, microwave-multiplexed Kinetic Inductance Detectors (KIDs), with energy threshold below 100 eV<sub>nr</sub> and target mass around 30 g. The single detector unit will be engineered to ensure a straightforward scalability to a future kg-scale experiment. In poster we will describe the proposed technology and the prospects of the project.

### **Less than 5 years of experience since completion of Ph.D**

N

### **Student (Ph.D., M.Sc. or B.Sc.)**

N

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**Classifica Sessioni:** Poster session

**Classificazione della track:** Low Temperature Detector Development and Physics