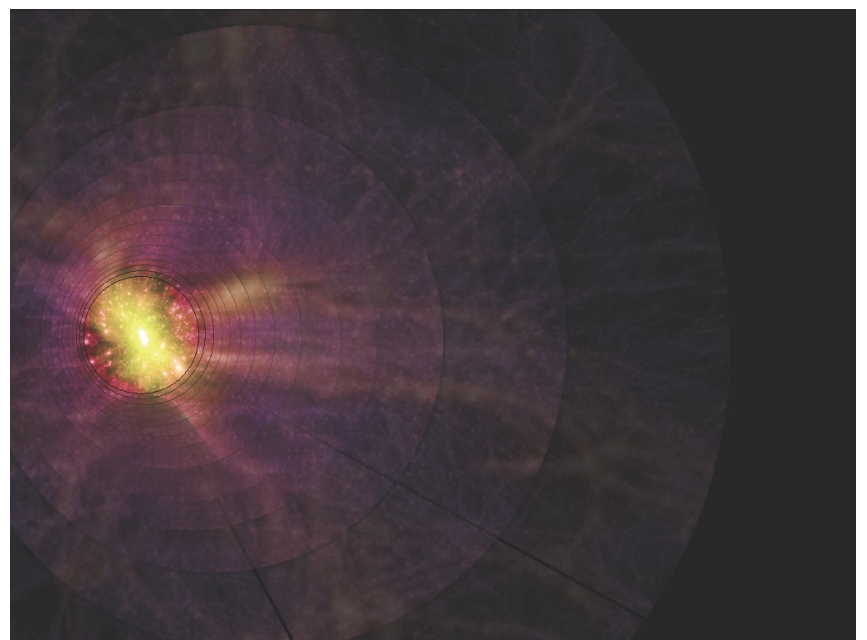


# Dark matter Axions through the looking glass: the MADMAX experiment.

**Tuesday, 02 April 2019, DESY Auditorium, 16:45 h**

**Javier Redondo (Zaragoza U. & MPP Munich)**

The QCD axion is a well-motivated candidate for the dark matter (DM) of the Universe. The standard “haloscope” experiments like ADMX in the US are optimal if the axion mass lies in the micro-eV mass range. Although uncertain, the theoretically preferred axion DM mass seems to be higher. In this talk we will introduce a novel concept, the dielectric haloscope, that is capable to search for axion DM in the 100 micro-eV mass range. The MADMAX collaboration, born last year in DESY, has started an energetic program to develop the techniques required to realise such an experiment. In this talk we will describe our target hypothetical particle: the DM axion and our unique tool to unveil its existence: the MADMAX experiment.



- **Coffee, tea and cookies will be served at 16:30h**
- **After the colloquium there is a chance for private discussions with the speaker over drinks and pretzels**