# FIRST AION WORKSHOP INTRODUCTION

# AION WORKSHOP, MARCH 25, 2019

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#### Scope of the Workshop

The workshop will be a critical milestone for the assembly of a complete proposal to construct and operate a next generation Atomic Interferometric Observatory and Network (AION) in the UK.

- ➤ It will enable the exploration of properties of dark matter as well as searches for new fundamental interactions.
- ➤ In addition, the proposal is supposed to provide a pathway for detecting gravitational waves from the very early universe in the, as yet mostly unexplored, mid-frequency band, ranging from several milliHertz to a few Hertz.

The first day of the 2-day workshop will focus on the technology aspects of the project, while the second day will be devoted to discussions of the physics case and how to further develop and strengthen it.

➤ The project spans several communities: fundamental particle and astroparticle physics, atom interferometry, gravitational wave physics, and cosmology.

# O. Buchmueller AION Workshop

## 2 Days with Different Themes

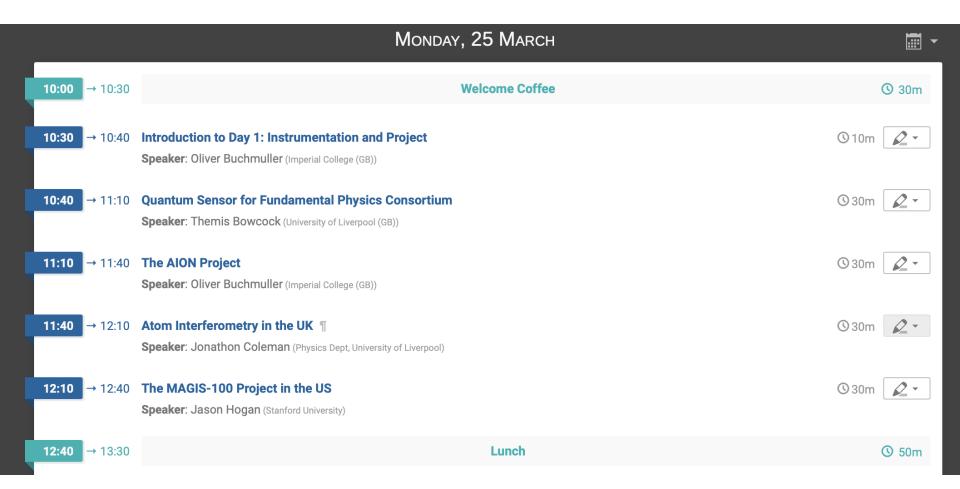
Day 1:
Instrumentation &
The AION Project

Day 2:

The Physics Case of AION



### **Agenda Today Morning**





### **Agenda Monday Afternoon**

