

# Heavy Ions and New Physics

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## Abstract | Main Topics

In the recent past, several proposals have been made to exploit heavy ion collisions at the Large Hadron Collider (LHC) to search for new phenomena in particle physics, including axion-like particles, long-lived particles beyond the Standard Model and magnetic monopoles.

The objective of this workshop is to bring together members of the involved communities to exploit the potential of these ideas, either during scheduled LHC runs or in dedicated efforts at the LHC or future colliders. We want to create a unique opportunity for exchange between scientists working in different fields of experimental physics, theoretical physics, accelerator physics and detector physics that otherwise have little connection.

## Keynote speakers

Elena BRATKOVSKAYA (GSI) – Roderik BRUCE (CERN) – Émilien CHAPON (CERN) – Mateusz DYNDAL (CERN)  
Hesham EL FAHAM (UCLouvain) – Glennys FARRAR (NYU) – Oliver FISCHER (Liverpool University)  
Taku GUNJI (Tokyo University) – Lucian HARLAND-LANG (Oxford University)  
Yen-Jie LEE (Massachusetts Inst. of Technology) – Tanguy PIEROG (KIT, IAP)  
James PINFOLD (Alberta University) – Arttu RAJANTIE (Imperial College)  
Suvrat RAO (Hamburg University) – Kristof SCHMIEDEN (CERN) – Ralf ULRICH (KIT)  
Aditya UPRETI (Alabama University) – Susanne WESTHOFF (Heidelberg University)

## Program

## Organizers

Marco DREWES (UCLouvain); David D'ENTERRIA (CERN);  
Andrea GIAMMANCO (UCLouvain); Jan HAJER (Basel University)

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