

# Light New Physics: From Table-Top Experiments to the LHC



**Monday 29 November 2021 - Friday 10 December 2021**

**Mainz Institute for Theoretical Physics, Johannes Gutenberg University**

## Scientific Programme

## Brief list of scientific goals of the MITP Scientific Program

### Overall goal:

Bring together leading experimentalists and theorists from the Quantum sensor community and the LHC with a research focus in tests of fundamental physics

Achieve a better understanding of the sensitivities and limitations of collider and quantum sensor approaches

Produce a proposal to guide a future program of dedicated LHC searches for light new physics  
Detail the open theory questions that need to be solved to achieve a comparison in specific New Physics models  
Construct a map of the parameter space with existing results from quantum sensor and LHC searches