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## A Forward Hadronic Calorimeter for ALICE at the LHC

*Friday, 31 March 2023 15:40 (1h 50m)*

Studying the gluon density in nucleons and nuclei require measurements at low- $x$ . The Forward Calorimeter (FoCal) upgrade for ALICE will provide just such measurements. FoCal comprises two components, an Electromagnetic calorimeter (FoCal-E) and a Hadronic Calorimeter (FoCal-H). This poster will present results from the first prototype that informed the design of the second prototype.

In particular, I will present recent results from testbeam measurements performed with FoCal-H second prototype at the CERN SPS, and how this compare to Monte Carlo simulations using different GEANT physics lists. Finally, I will present simulations of physics processes of interest based on realistic performance parameters of FoCal-H.

### Field of study

Quantum Physics

### Supervisor

Ian Bearden

**Primary author:** DUFKE, Laura Marie (University of Copenhagen)

**Session Classification:** Poster session: Enjoy the posters!!!