KIT contributions to computing matters
LUXE computing kick-off on Aug 31st

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Planned contributions

Research interests and possible support

- Research interests

  - BSM physics at LUXE-NPOD

  - (Real-time) reconstruction algorithms (calorimeter, tracking, vertexing)

  - LUXE-NPOD calorimeter (GEANT4 studies, readout, DAQ, …)

- Possible support

  - Mechanical workshops

  - Technical information and electrical engineering
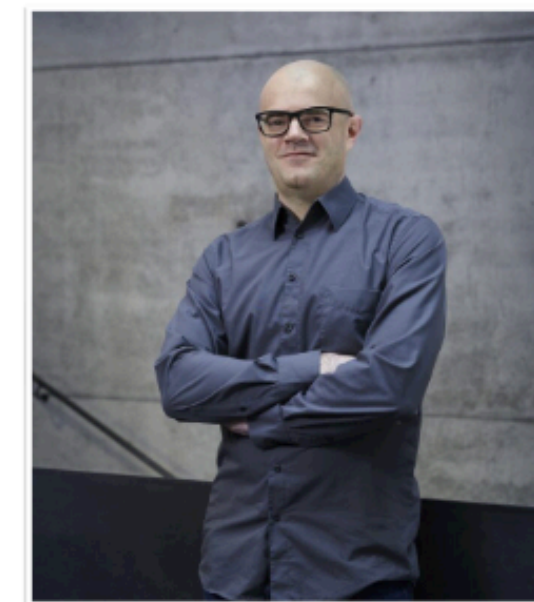
  - Large theory department

  - Computing

Planned contributions

People

- Torben & Markus

- 1 Post Doc

- 50% PhD

- BSc and MSc students

+ Computing group

Torben FERBER

- Professor at KIT since 2021 (previously DESY)

- Belle II
  - B-Physics and BSM (ALPs, LLPs, …)
  - Software and computing
  - Calorimeter reconstruction, performance, and operation
  - L1 Trigger (ML on FPGAs)

- Member of the FPC@PBC

Markus KLUTE

- Professor at KIT since 2021 (previously MIT)

- CMS
  - Higgs Physics in and beyond the SM
  - Software and computing
  - Calorimeter reconstruction, performance, and operations

- FCC-ee:
  - Software and computing
  - Physics case

Possible Computing Contributions

Up for discussion

- Tape storage (cold copy)

- Disk storage

- Data management

- Processing infrastructure

- Analysis facility (hardware and software stack)

- Software contributions (framework, simulation and reconstruction)