



Contribution ID: 134

Type: Poster

## Continuous Integration for the FairRoot Software Stack

*Tuesday 25 October 2022 11:00 (30 minutes)*

The FairRoot software stack is a toolset for the simulation, reconstruction, and analysis of high energy particle physics experiments (currently used i.e. at FAIR/GSI, and CERN). In this work we give insight into recent improvements of Continuous Integration (CI) for this software stack. CI is a modern software engineering method to efficiently assure software quality. We discuss relevant development workflows and how they were improved through automation. Furthermore, we present our infrastructure detailing its hardware and software design choices. The entire toolchain is composed of free and open source software. Finally, this work concludes with lessons learned from an operational as well as a user perspective and outlines ideas for future improvements.

### Significance

### References

### Experiment context, if any

**Primary authors:** KLEIN, Dennis (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE)); Dr TACKE, Christian (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE))

**Co-authors:** UHLIG, Florian (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE)); AL-TURANY, Mohammad (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE))

**Presenters:** KLEIN, Dennis (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE)); Dr TACKE, Christian (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE))

**Session Classification:** Poster session with coffee break

**Track Classification:** Track 1: Computing Technology for Physics Research