



# The Status of SPeeDy framework

**Valeriy Onuchin**

JINR/DNLP/SPD

9.11.2022

## The last slide from my presentation on Collaboration Meeting

### Which way to go?

Recently I ran examples from FCCW including full Geant4 simulation based on Gaudi/key4hep. I like it. These examples include calorimeter reconstruction.

Key4HEP is framework which claims to be an universal solution to all problems. This collaborative effort of international team from many institutes, mostly from CERN. Their slogan “**Key4HEP - Turnkey Software for Future Colliders**”.

<https://key4hep.github.io/>

**My question - where to go?**

**Develop our minimalist framework or join this collaboration?**

# Where to go?

I decided to develop our minimalist framework based on key4hep.  
I took from where only 3 modules:

- **k4Gen** - Gaudi Components for Generators, which allows to generate Pythia8 events
- **k4SimGeant4** - Gaudi Components for Geant4 Simulation
- **k4FWCore** - Gaudi package that provides the PodioDataService, that allows to use podio-based event data models in Gaudi workflows.

# Where we are?

## The steps of adaptation:

- **Key4hep** fully depends on CVMFS, but we want to have autonomous, container like system.
- All externals must be local, so they are the part of framework.
- As consequences – a lot of CMake files rewriting work.

The main structure of framework created and available at JINR Gitlab

<https://git.jinr.ru/x2v0/speedy>

It's used as my working horse for continuous development and not yet as public distribution. Any suggestions, critics are welcome!

I desperately need a collaborator for this work.