

SGSO - Software meeting

Harm

Goal: Fair comparison of simulation

Some thoughts:

- ▶ Common framework / Shared components
- ▶ Manpower is limited
- ▶ Time is limited.. (?)
- ▶ A lot of work has been done already..

What do we have at MPI-K?

- ▶ Large library of CORSIKA shower
(also converted to root-files)
 - ▶ Range of Altitudes (3 - 6 km) / Zenith Angles / Energy
(discrete / spectrum)
 - ▶ gamma and protons
 - ▶ Some with different hadronic interaction models
- ▶ GEANT Models:
 - ▶ For different configurations (see <https://indico.in2p3.fr/event/17591/contributions/65742/>)
 - ▶ Output parametrized in detector response (current limited to vertical particles).
- ▶ Array simulations
 - ▶ C++ code with array layout
 - ▶ Event display
 - ▶ Output after detection => Reconstruction within python code...

What do we use...

- ▶ Git
- ▶ Simple make files
- ▶ ROOT
- ▶ C++
- ▶ Python

What can we do before the meeting

- ▶ Decide on repository
- ▶ Dependencies
- ▶ Build system
- ▶ Language