

# SixTrack Support

- **SixTrack has reached a pretty mature state – No development planned for the SixTrack proper.**
- **The Sixtrack collimation version is in good shape and is still being further improved.**
- **SixTrack input files can be conveniently produced by a MAD-X run of your favorite machine.**
- **The SixTrack run environment has also been finalized by Eric McIntosh.**
- **Runs can be started on LSF, CPSS, BOINC and even on the GRID from these scripts.**
- **Massive beam-beam studies are being performed on BOINC.**

# Problems

- I am still providing support although I have no time allocated for this maintenance job. Surprisingly enough there is quite some demand on using SixTrack!
- For the time being there is no solenoid in SixTrack.
- Fortunately Eric McIntosh is still available to help with the run environment!
- There is presently no documentation available of how to use the newest run environment. Long planned and hopefully comes in October/November.
- Older versions of the run environment may fail → *please use newest version!*
- There has been a recent incident with CASTOR. This has been working for 10 years now and our scripts have not changed to this respect. The issue will be solved once the CASTOR expert is back at CERN (action → Eric and myself).
- A serious bug has recently been detected in the MAD-X convertor: Under certain conditions there was a complete mix-up of the multipoles in the SixTrack input files. As a result the SixTrack runs may either work or crash. Hans Grote and myself have solved the problem in MAD-X (V3\_03\_17) (action → please check if you SixTrack input files are identical running with the newest MAD-X version.)