

Pytac: A Python Tool for Accelerator Control & Simulation at Diamond Light Source

Wednesday 12 February 2025 14:45 (2h 15m)

At Diamond, many Python high-level applications interact with the accelerator (e.g., orbit feedback systems, BBA, etc.). Most use PyTAC (Python Toolkit for Accelerator Control) to interact with the machine.

We also have ATIP (Accelerator Toolbox Interface for Pytac). This allows users to interact with a PyAT simulation through PyTAC in the same way they would use the real machine.

In this demo, we will demonstrate:

- The basics of accelerator control using PyTAC.
- How to switch between the live and simulated machines, both for a single function call and for a whole session.
- Finally, show how you can control the simulator, using the same functions that were previously used on the live machine.

Primary author: NICHOLLS, Tobyn (Diamond Light Source)

Co-author: Mr GAUGHRAN, Martin (Diamond Light Source)

Session Classification: Show & tell

Track Classification: Show&Tell