Contribution ID: **13** Type: **Invited talk**

PyORBIT as an Online Model and Virtual Accelerator at SNS

Thursday, 3 October 2024 11:00 (30 minutes)

PyORBIT is a Partice-in-Cell simulation code widely used in the accelerator community. We have developed accelerator simulation software that includes EPICS and runs PyORBIT as its physics model. This PyORBIT virtual accelerator is currently in use as a digital twin for developing Control Room software, training and testing Machine Learning models, and training operators at the Spallation Neutron Source.

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Session Classification: Sessions in Living Room 1+2

Track Classification: E-2 Surrogates and Machine Learning, Optimisation, Control