IPAC '23

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Magnetic field tools, a C++/Python library for magnetic field processing

Wednesday, 10 May 2023 16:30 (2 hours)

Magnetic Field Tools is an open source library being developed by the Insertion Devices and Magnets group at the ESRF. It is dedicated to the analysis of static magnetic field values obtained from simulations and measurements. Magnetic field models such as 2D and 3D multipoles in various geometries, as well as boundary element models, can be built from sets of field samples. The library was designed in order to be easily extendable to other types of field models. It is implemented in C++ and a Python binding is available. Application to undulator magnets, 3D multipole fringe fields and solenoids will be presented.

Funding Agency

Footnotes

I have read and accept the Privacy Policy Statement

Yes

Primary author: LE BEC, Gaël (European Synchrotron Radiation Facility)

Presenter: LE BEC, Gaël (European Synchrotron Radiation Facility)

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