

Machine Learning Activities for Accelerator Controls at European XFEL

Friday 25 November 2022 14:20 (10 minutes)

The abundance of data currently stored for heterogeneous subsystems represents an excellent opportunity for data analysis. Data-driven approaches, relying solely on data can significantly benefit from having massive streams of data available. So far, frequently the modeling activities focused on model-based analyses which relied on human expertise. In this talk, we provide examples of activities of purely data-driven approaches for anomaly detection and modeling of the behavior of pulsed linacs like European XFEL and their subsystems that do not rely on human-expertise modeling.

Primary author: SULC, Antonin (MCS (MCS Fachgruppe 4))

Co-authors: EICHLER, Annika (MSK (Strahlkontrollen)); WILKSEN, Tim (MCS (MCS Fachgruppe 1)); KAMMERLING, Raimund (MCS (MCS Fachgruppe 1))

Presenter: SULC, Antonin (MCS (MCS Fachgruppe 4))