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Machine learning-based longitudinal phase space tuning for X-ray free-electron laser

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Precise control of the longitudinal phase space (LPS) in X-ray free-electron laser (XFEL) is critical for optimizing beam qualities and X-ray pulses properties required by the experimental stations. We present results of using machine learning techniques for LPS shaping and control with Bayesian optimization.

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Footnotes

Author: ZHU, Zihan (SLAC National Accelerator Laboratory)

Co-author: EDELEN, Auralee (SLAC National Accelerator Laboratory)

Presenter: ZHU, Zihan (SLAC National Accelerator Laboratory)

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