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Machine learning for an X-ray FEL

Monday 11 March 2019 11:00 (30 minutes)

X-ray Free Electron Lasers (XFELs) are among the most complex accelerator projects in the world today. With large parameter spaces, sensitive dependence on beam quality, huge data rates, and challenging machine protection, there are diverse opportunities to apply machine learning (ML) to XFEL operation. This talk will summarize promising ML methods and highlight recent examples of successful applications at the Linac Coherent Light Source (LCLS).

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