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## **Initial application of machine learning for beam parameter optimization at the Hefei Light Source II**

*Thursday, 11 May 2023 16:30 (2 hours)*

Machine learning techniques have developed rapidly in the last decade and are widely used to solve complex scientific and engineering problems. Many accelerator laboratories internationally have begun to experiment with machine learning and big data techniques for processing accelerations. This paper presented the application of machine learning to the Hefei Light Source. Including the simulation of the tune and the calibration of the online experiment that met the design requirements and simulation of the beta parameter correction with deep learning. Based on this, online beta calibration will be carried out in the future.

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### **Footnotes**

### **I have read and accept the Privacy Policy Statement**

Yes

**Primary authors:** YU, Yongbo (University of Science and Technology of China); XUAN, Ke (University of Science and Technology of China)

**Co-authors:** LI, Chuan (University of Science and Technology of China); LIU, Gongfa (University of Science and Technology of China); XU, Wei (University of Science and Technology of China)

**Presenter:** YU, Yongbo (University of Science and Technology of China)

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