IPAC '23

Contribution ID: **954** Contribution code: **WEPA108**   Type: **Poster Presentation**

Data intensive science and particle accelerators: driving science and innovation

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

Particle accelerators and light sources are some of the largest, most data intensive, and most complex scientific systems. The connections and relations between machine subsystems are complicated and often nonlinear with system dynamics involving large parameter spaces that evolve over multiple relevant time scales and accelerator systems.

Data Intensive Science offers exciting prospects for accelerator design and operation. This includes the optimization of machine design and the reconstruction of transverse beam distributions using machine learning, as well as data analysis in high data rate monitors. This contribution presents the new Liverpool Center for Doctoral Training for Innovation in Data Intensive Science (LIV.INNO) and its exciting research and training program.

Funding Agency

Footnotes

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Yes

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Session Classification: Wednesday Poster Session

Track Classification: MC5: Beam Dynamics and EM Fields: MC5.D13: Machine Learning