

Unleashing the power of digital transformation in accelerator physics: a new collaborative approach

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The digital transformation of our society, fueled by big data, plays a vital role in addressing environmental concerns. The world of particle accelerators is constantly evolving, and both digital and environmental challenges have become significant factors that impact it. In this context, ensuring the reliability and optimal operation of research infrastructures becomes of utmost importance. To tackle these challenges, the European Accelerator Physics community is coming together with a synergetic approach, leveraging machine learning and artificial intelligence techniques. However, this endeavor brings its own set of challenges, particularly in terms of knowledge sharing and open science. Sharing computations, data, and methods in an open, FAIR (Findable, Accessible, Interoperable, Reusable), and collaborative context lies at the core of this new network. This presentation will focus on introducing this newly established European Network, discussing its current developments, and outlining the roadmap it aims to draw. The network's ambitions are not confined to the European sphere but strive to foster connections with the worldwide scientific community, creating a fully interconnected global endeavor.

Abstract Category

Community Engagement

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