

OmniJet-alpha and beyond: foundation model updates

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OmniJet-alpha is the first cross-task foundation model for particle physics, demonstrating transfer learning between an unsupervised problem (jet generation) and a classic supervised task (jet tagging). While OmniJet-alpha is still at a prototype stage, the successful development of foundation models for physics data would represent a major breakthrough, as they have the potential to enhance physics performance while simultaneously reducing the necessary training time and data significantly. This talk will give an overview of the model, and present new developments and results using additional training sources.

Track

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Session Classification: Foundation models