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Abstract for an Invited Paper for the APR21 Meeting of the American Physical Society

## **Recent progresses in using Artificial Intelligence for Particle Physics** DAVID ROUSSEAU, IJCLab, CNRS/IN2P3, Universite Paris-Saclay

Use of Machine Learning in High Energy Physics is growing exponentially. I shall report on most recent advances in particular generative models to accelerate simulation, Invertible Neural Networks and Normalising Flows, anomaly detection for automatic data quality monitoring (and maybe new physics ?), and Graph Neural Networks applications.