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ML Track Fitting in Nuclear Physics

Tuesday, 5 November 2019 16:45 (15 minutes)

Charged particle tracking represents the largest consumer of CPU resources in high data volume Nuclear Physics experiments. An effort is underway to develop ML networks that will reduce the resources required for charged particle tracking. Tracking in NP experiments represent some unique challenges compared to HEP. In particular, track finding typically represents only a small fraction of the overall tracking problem in NP. This presentation will outline the differences and similarities between NP and HEP charged particle tracking and areas where ML learning may provide a benefit. The status of the specific effort taking place at Jefferson Lab will also be shown.

Consider for promotion

No

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Session Classification: Track 6 –Physics Analysis

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