

## The TrackML tracking challenge : status report at half time

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LHC experiments need to reconstruct the trajectory of particles from the few precise measurements in the detector. One major process is to « connect the dots », that is associate together the points left by each particle. The complexity of the process is growing exponentially with the LHC luminosity, so that new algorithms are needed. The TrackML challenge is a two phases competition to tackle the issue: 100.000 points to be associated into 10.000 tracks in less than 100 seconds. The first phase (with no speed incentive) has run on Kaggle over the summer, while the second one (with a strong speed incentive) is just starting on Codalab <https://sites.google.com/site/trackmlparticle/> . I will summarize the preliminary findings and perspective.

### Application

Object ID

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