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## Machine learning assisted Jet tomography

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We tried to locate the initial jet production positions in QGP, using the jet energy loss along the path length direction, the asymmetry perpendicular to the path length from gradient-tomography and the energy momentum distribution inside the jet with deep learning. These machine learning assisted Jet tomography help to locate the jet production positions with reasonable precision that helps us to look for Mach cones whose opening angles are direct measures of the QGP equation of state.

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