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## Development of a Vertex Finding Algorithm using Recurrent Neural Network

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We developed a novel algorithm of vertex finding for future lepton colliders such as the International Linear Collider. We deploy two networks; one is simple fully-connected layers to look for vertex seeds from track pairs, and the other is a customized Recurrent Neural Network with an attention mechanism and an encoder-decoder structure to associate tracks to the vertex seeds. The performance of the vertex finder is compared with LCFIPlus.

### Time Zone

Asia/Pacific

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