

The Model

Cool, but How?

A Two-Stage Training Strategy

A Hybrid Model to Capture Local & Global Information:

- **SSCN (Local Info):**
 - A convolution that operates only on active voxels.
 - Efficiently learns local 3D features (shower shapes, track segments).
- **Hierarchical Transformer (Global Info):**
 - **Intra-Module Attention:** Summarizes patterns *within* each detector module.
 - **Inter-Module Attention:** Combines module summaries to learn the *entire event topology*

