oaRooTracker **ROOT Tree with PHITS** truth particles **MARS** Fluka

The ICEDUST Framework

SimG4

Geant4-based particle tracking SimHitMerger

Resampling of truth hits to build bunch events

SimDetectorResponse

Gas avalanches, crystal showers, and electronics simulation

Calibration Constants **Database**

Production Target Simulations

oaRawEvent

Data decoding library

oaEvent

- Geometry description,
- Fieldmap description,
- Data: truth, hits, digits, reconstructed objects

CalibGlobal

Main control for subdetector calibration



MIDAS data from detector

oaUnpack

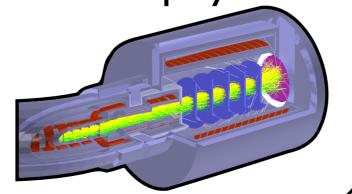
Convert raw data to new oaEvent files

ReconGlobal

Main control for subdetector reconstruction ReconsubDatC ReconsubDatR ReconSubDetA

Fast and slow control data from detectors, monitoring, and beam group

EventDisplay



AnalysisTools

Build histograms, produce oaAnalysis files

oaAnalysis

Simplified ROOT tree for stand-alone analysis B. Krikler, June 2016