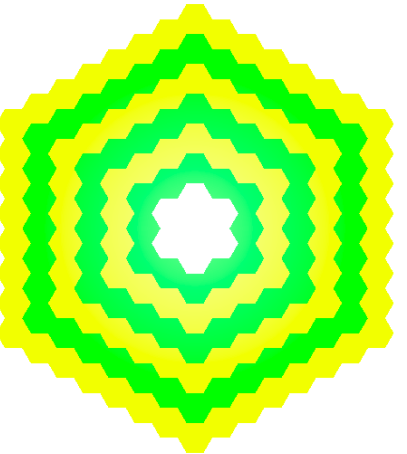
Beam–beam monitoring detector (BeBe)

Each side:
162 cells
6 rings
Each cell: 5 cm height x 2 cm width

Studies:
Centrality determination
Event plane resolution

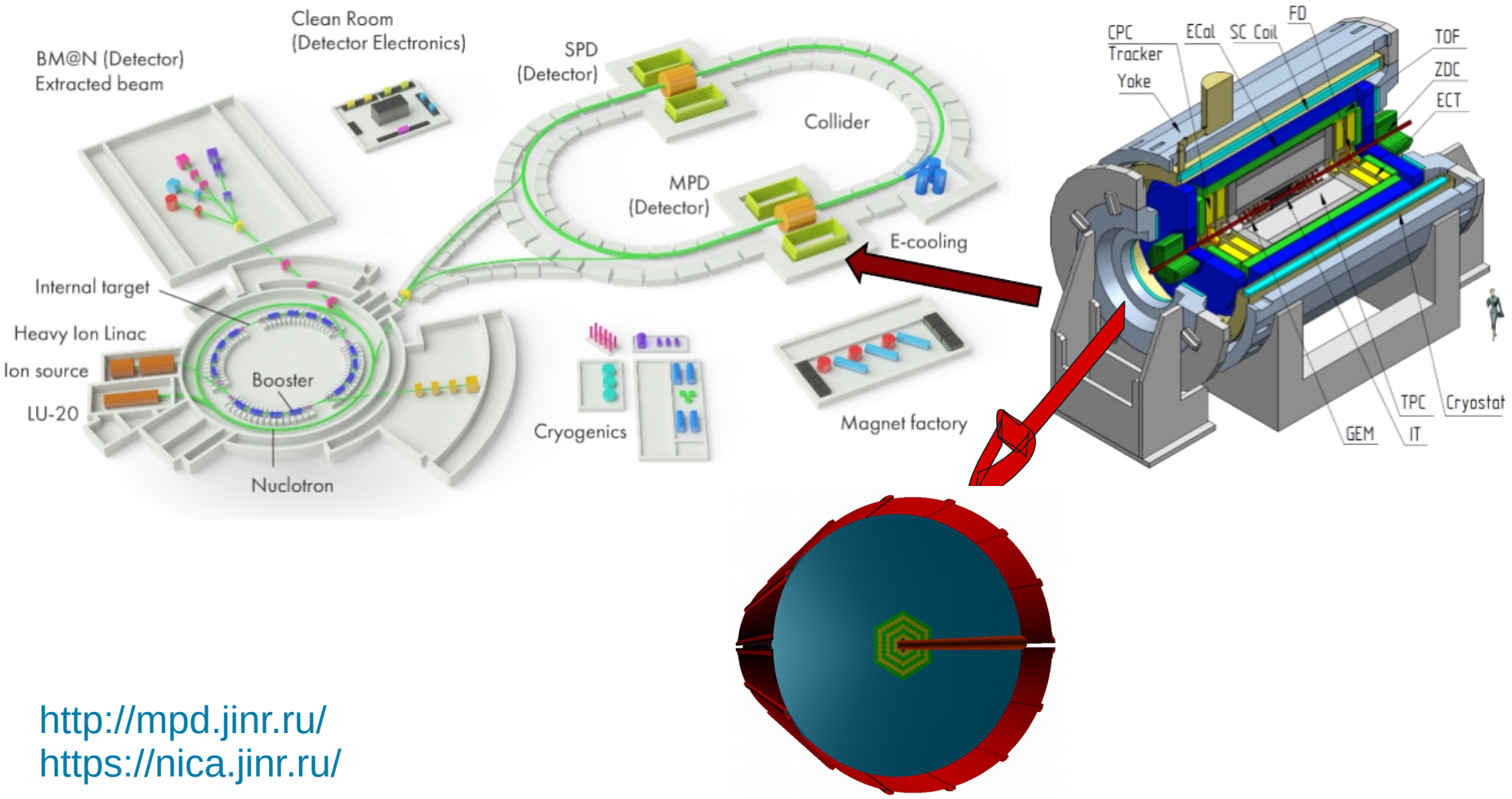
Names:
BMD
BEBE
BE-BE
BeBe



66 x 76 cm

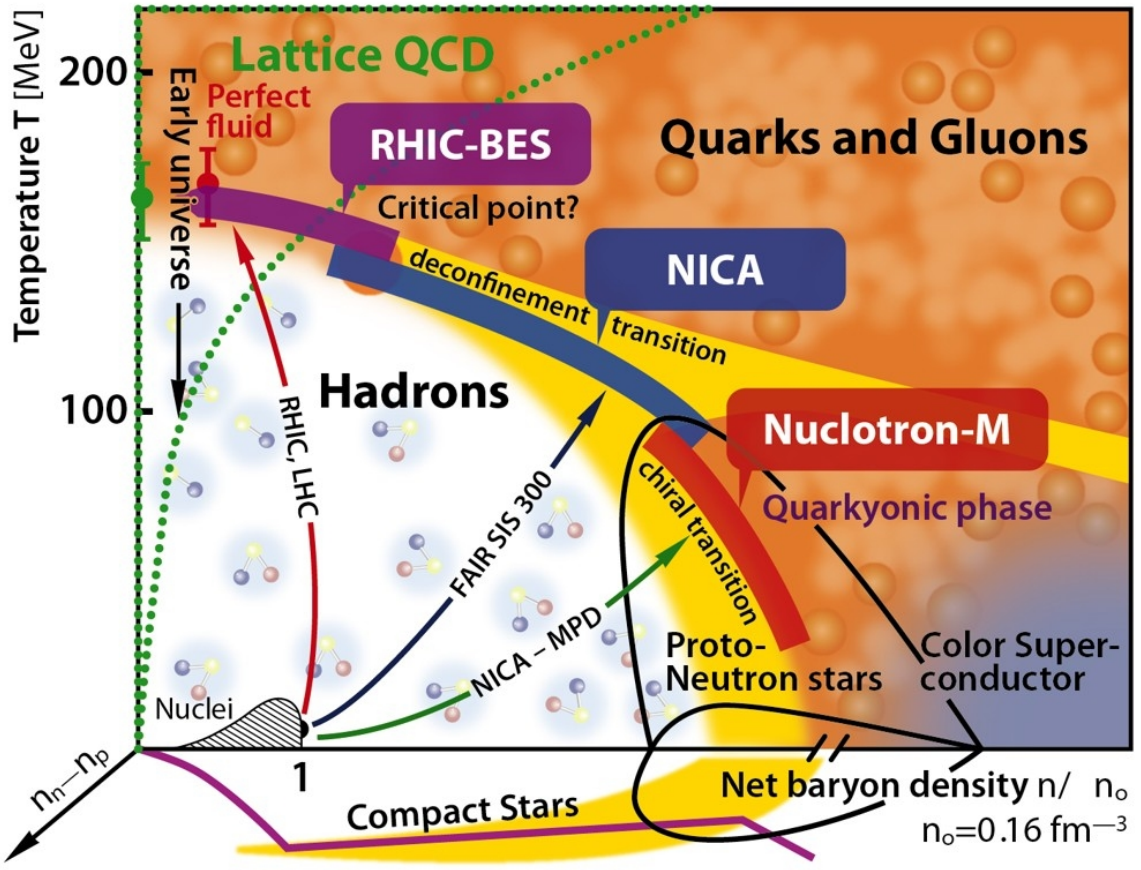
Luis Valenzuela-Cazares

MPD-NICA Experiment

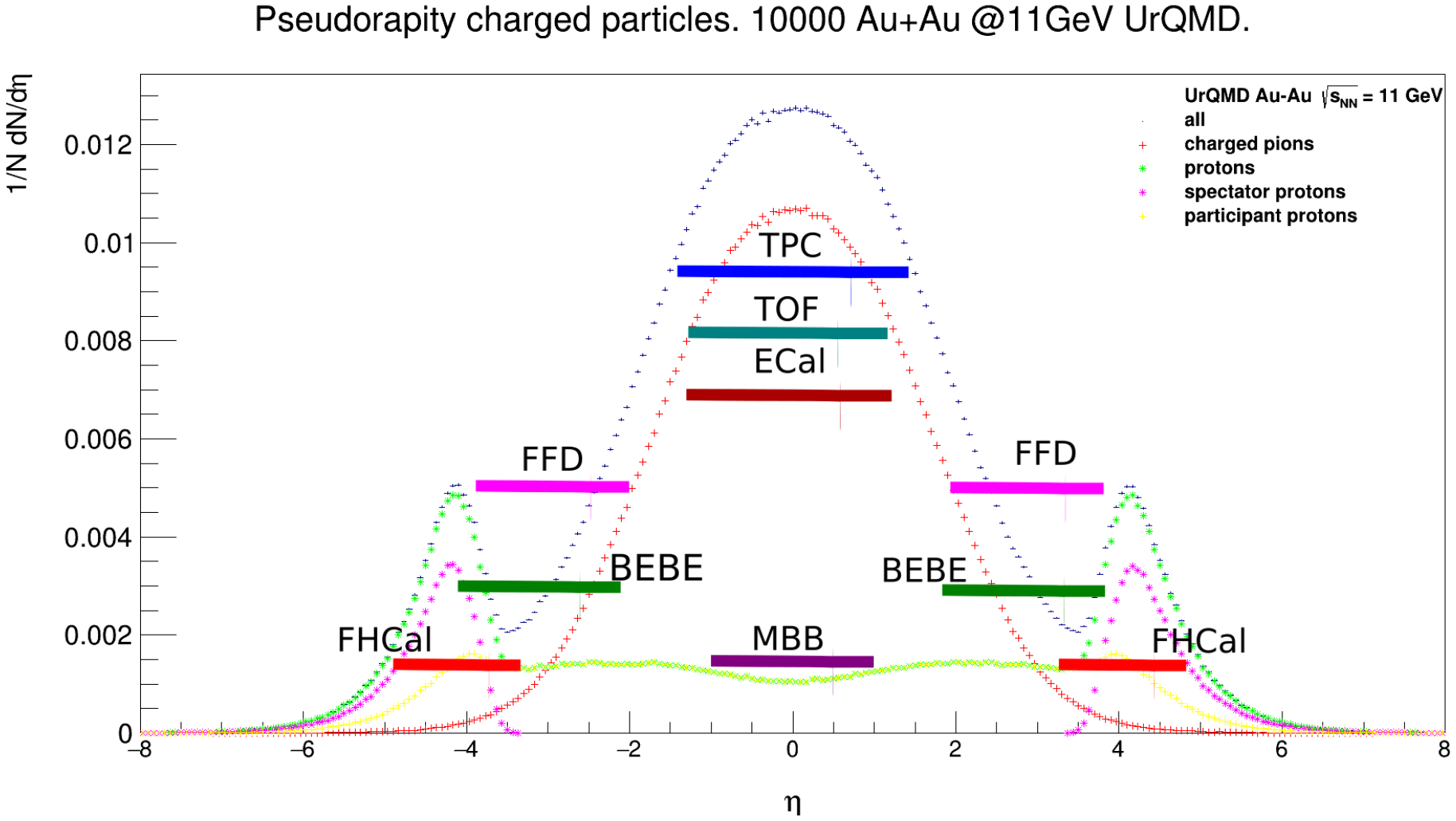


http://mpd.jinr.ru/
https://nica.jinr.ru/

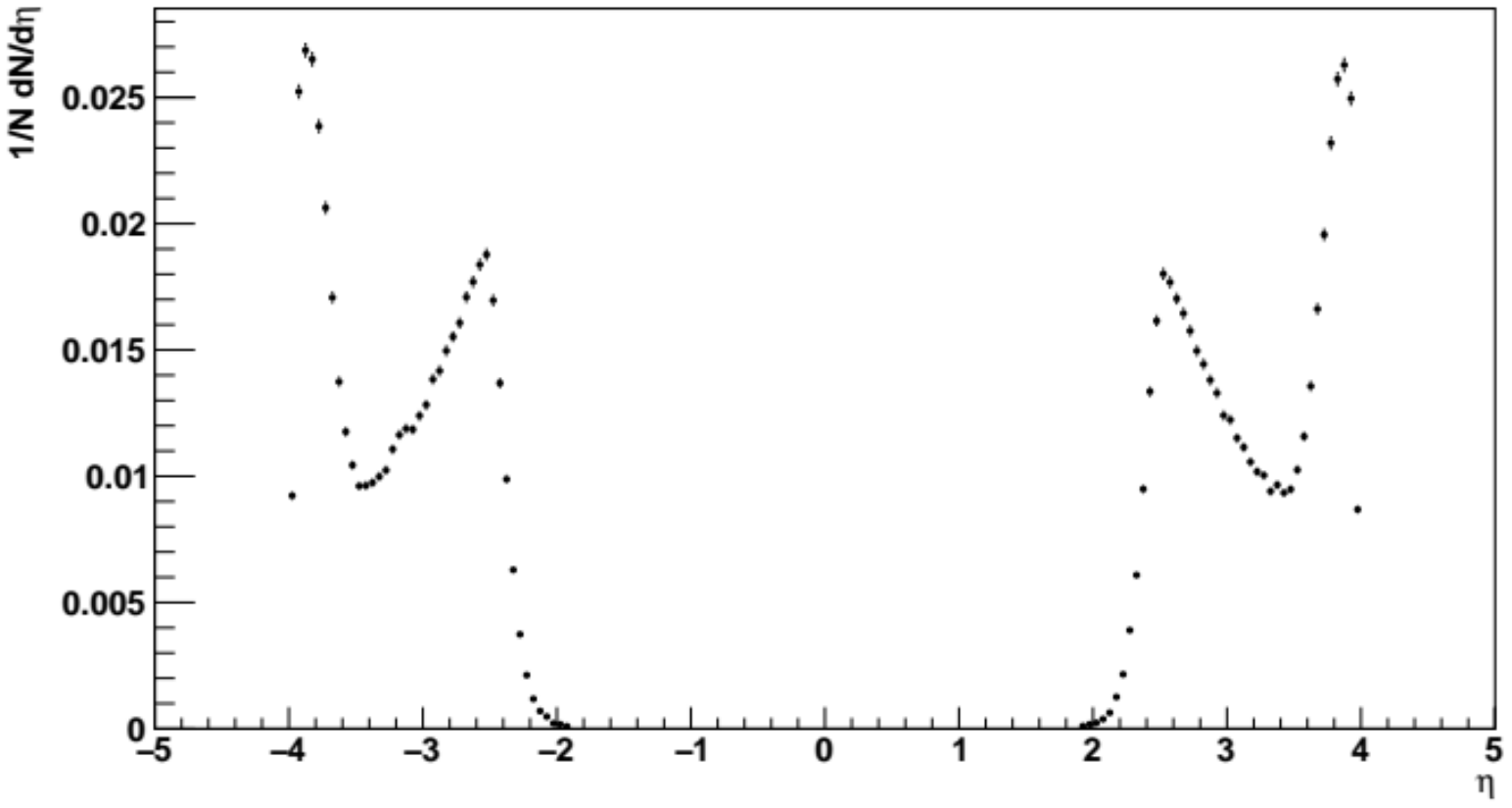
MPD-NICA Experiment: aims to study the phase diagram of nuclear matter at high conditions of temperature and density.



MPD Pseudorapidity coverage



BeBe Pseudorapidity coverage $1.9 < \eta < 3.97$



Simulation details

BeBe detector

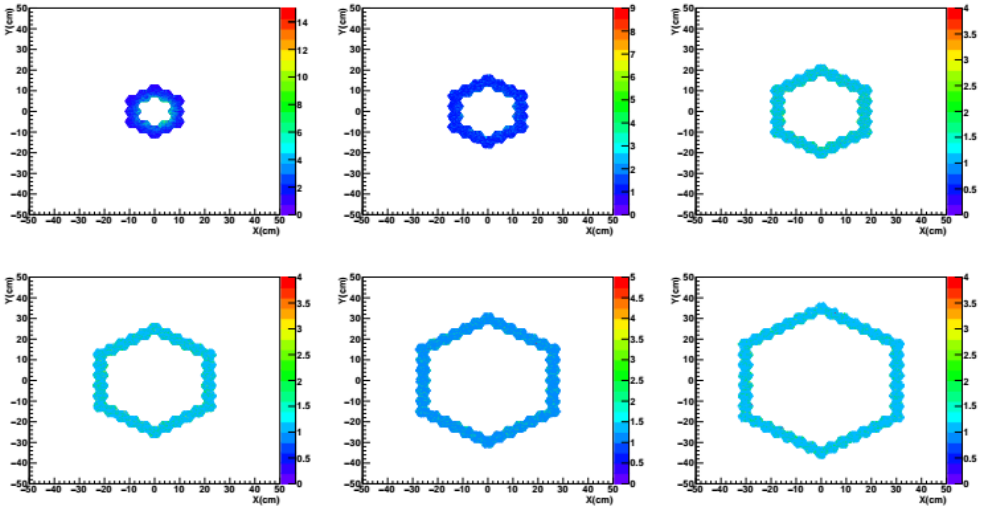
Beam - target: Au-Au

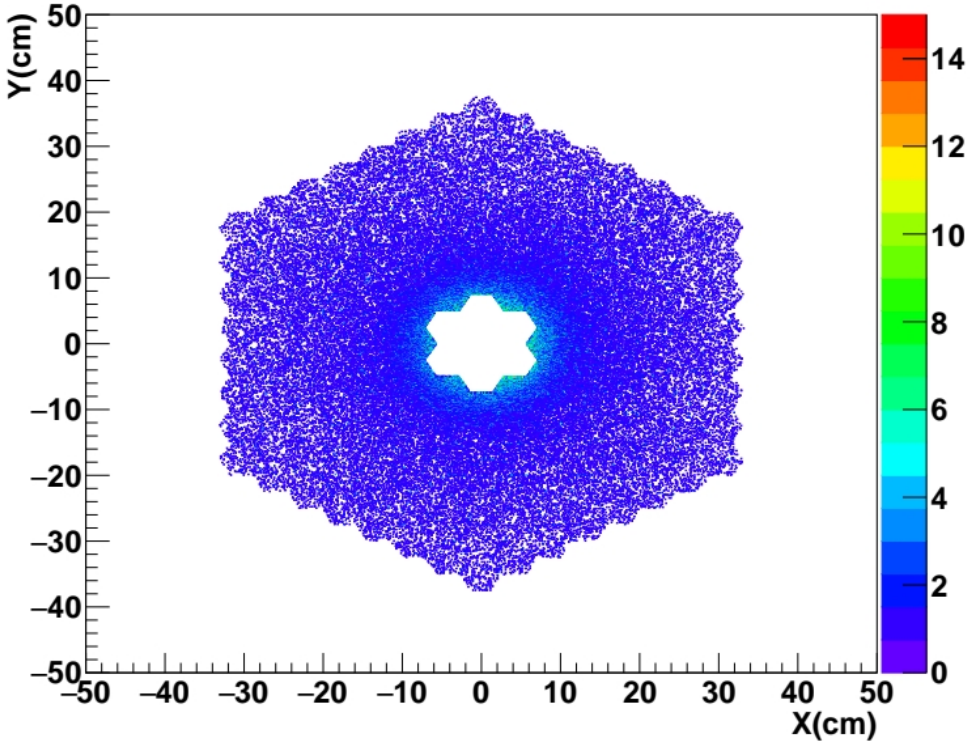
Generator: UrQMD v. 3.4

Events: 10 000 mbias (0-16 fm)

Energy: √ s = 11 GeV

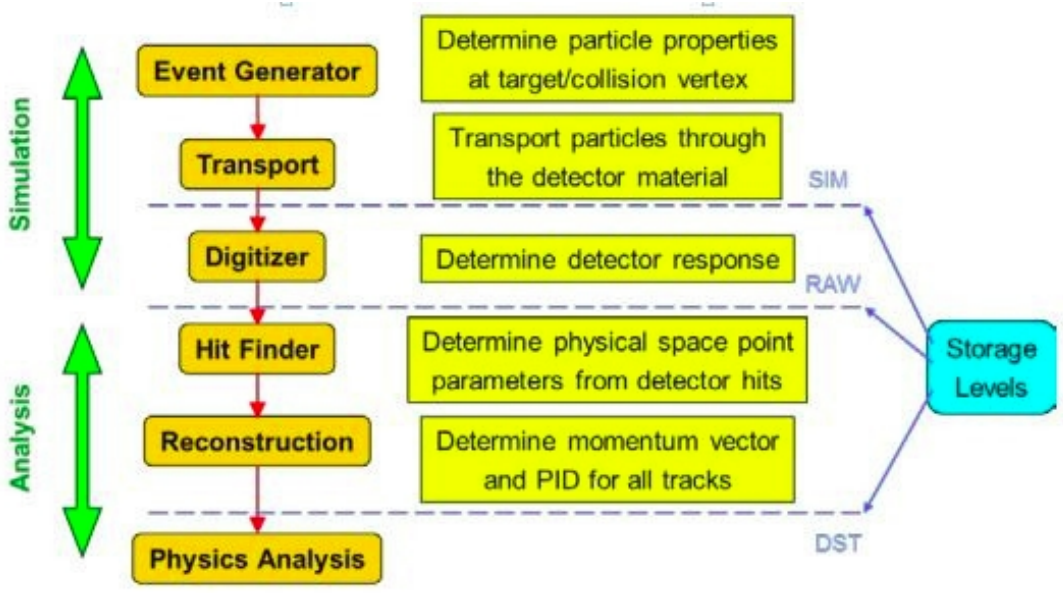
MPDROOT framework: BE-BE





Part II: MPDROOT framework for detector simulation

MPDROOT is a detector simulation and reconstruction, and data analysis framework developed for the MPD-NICA experiment based on FairRoot.



MPDROOT simulates:

- Particles and interactions
- Detectors geometries
- Interactions of particles with matter and electormagnetic fields

http://mpd.jinr.ru/mpdroot-start-guide/