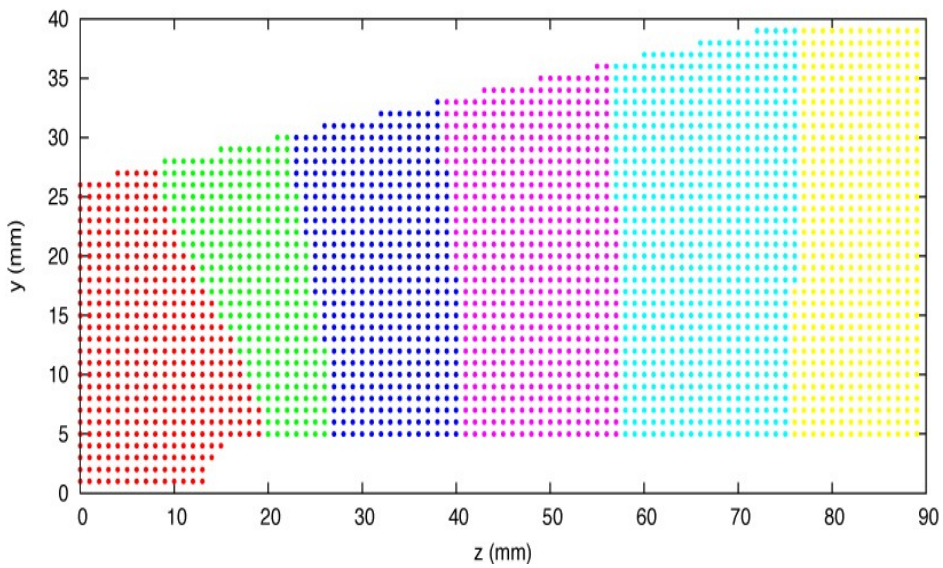
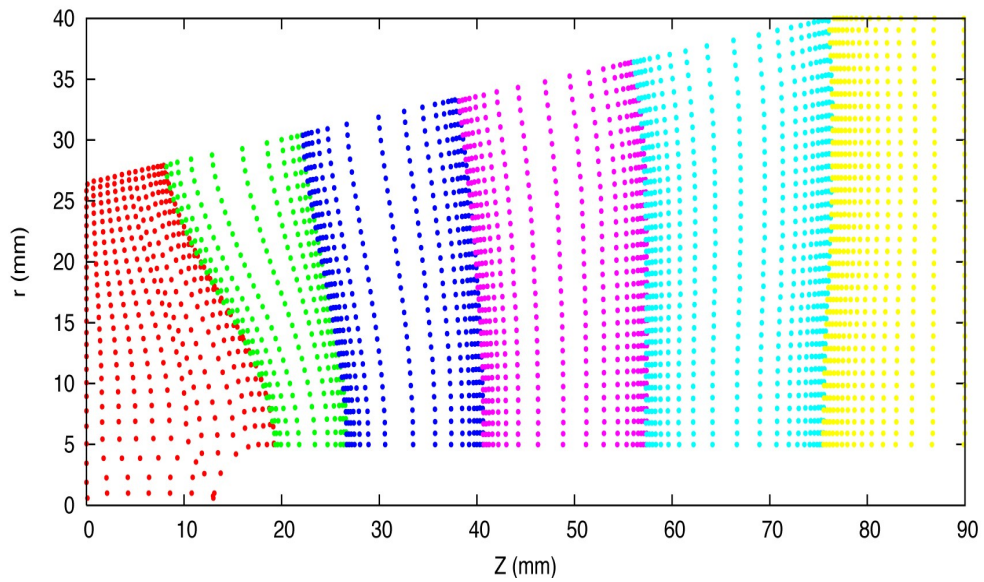
Quasi-cylindrical grid for GRETINA signal decomposition

Cartesian grid



New quasi-cylindrical grid



Colored regions correspond to segments

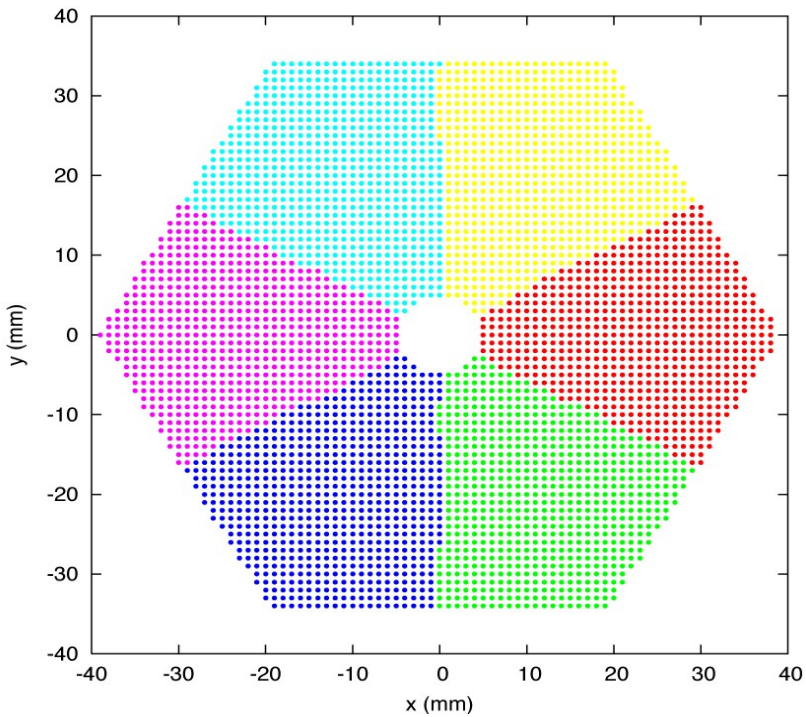
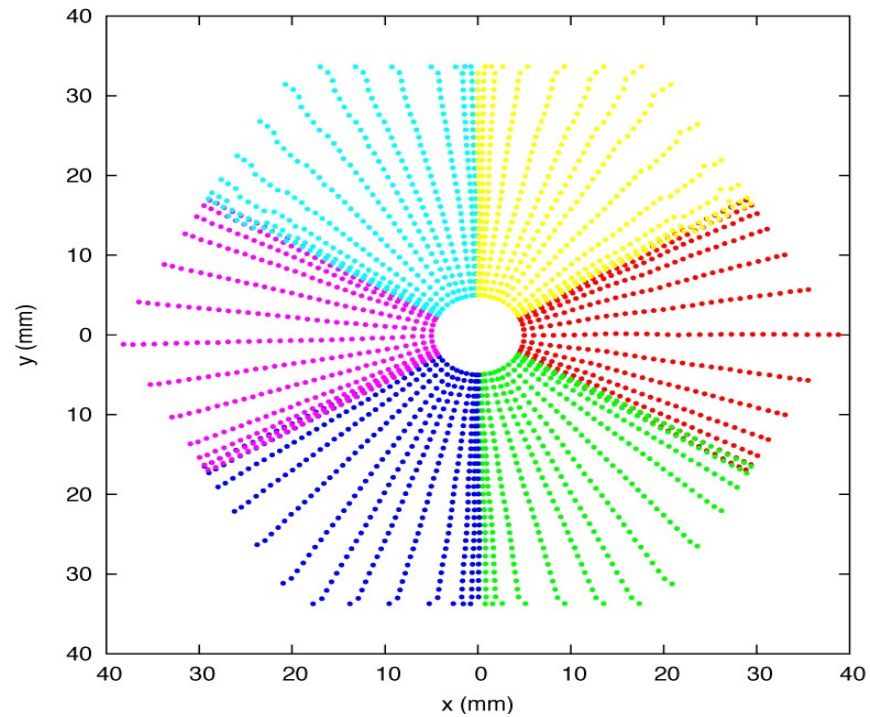
New quasi-cylindrical grid

- Point spacing optimized based on distance in RMS space
- The number of grid points can be reduced => improved speed
- Grid is based on crystal geometry => better and faster constraints for search algorithms

New quasi-cylindrical grid

- Average number of grid point spacing is 1mm in “r” and “z” directions
- 13 grid points (in each row) in “ ϕ” direction for each segment
- Segment boundaries & grid point RMS distances obtained from simulated signals
- Grid point distribution (in each direction) optimized for crystal average

Cartesian grid



New grid