

# Parallel Algorithms for Online Trackfinding at PANDA

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- Novel variants of Circle Hough trackfinding algorithms
  - Exploit geometrical properties of Hough elements (geom. locus)
  - Extend parallelism
- CH for single hits
  - Generate tracks: common set of sampling parameters
  - Parallel peakfinding
- CH for hit pairs
  - Generate tracks: solve problem of Apollonius
  - Simplified peakfinding/clustering
- Outlook
  - Integration into PandaRoot software framework
  - Finalize implementations for measurements of computing performance