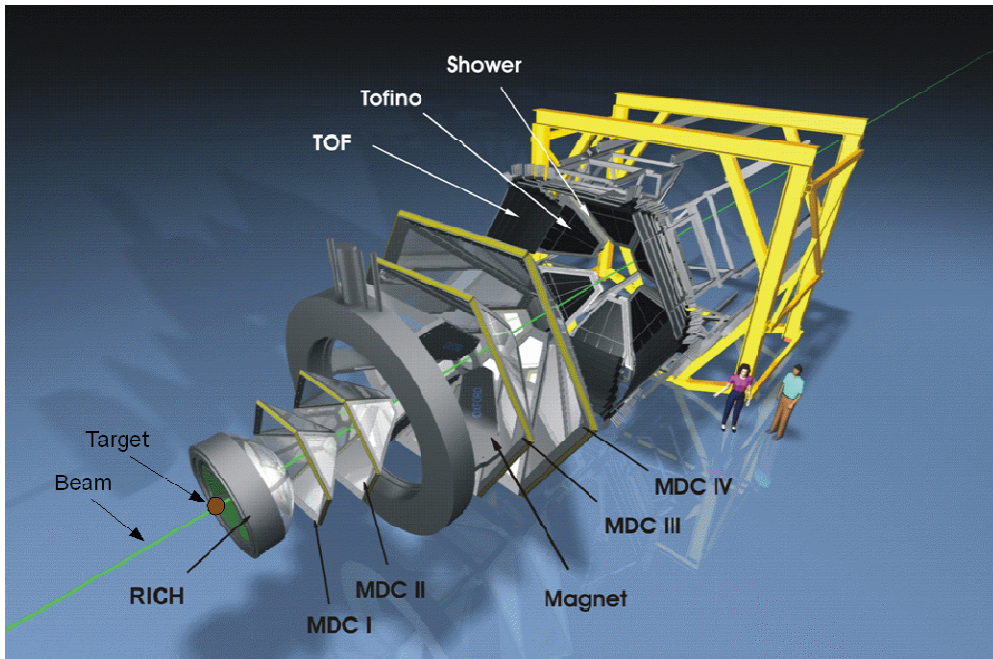


Trigger Algorithm Development Based on Compute Node

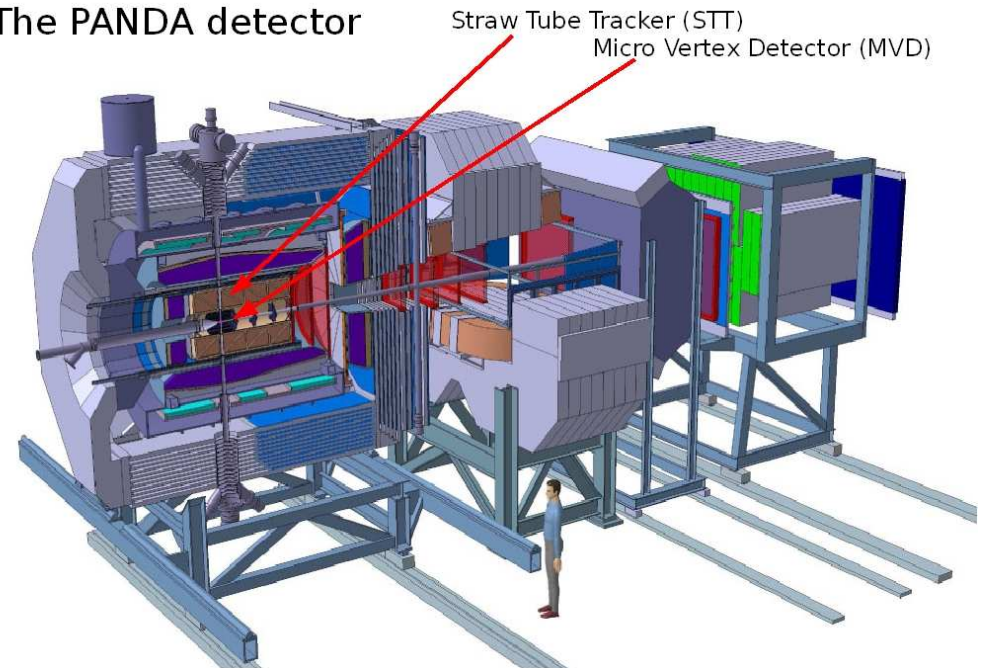
Presented by Ming Liu^{1,2} for all authors from

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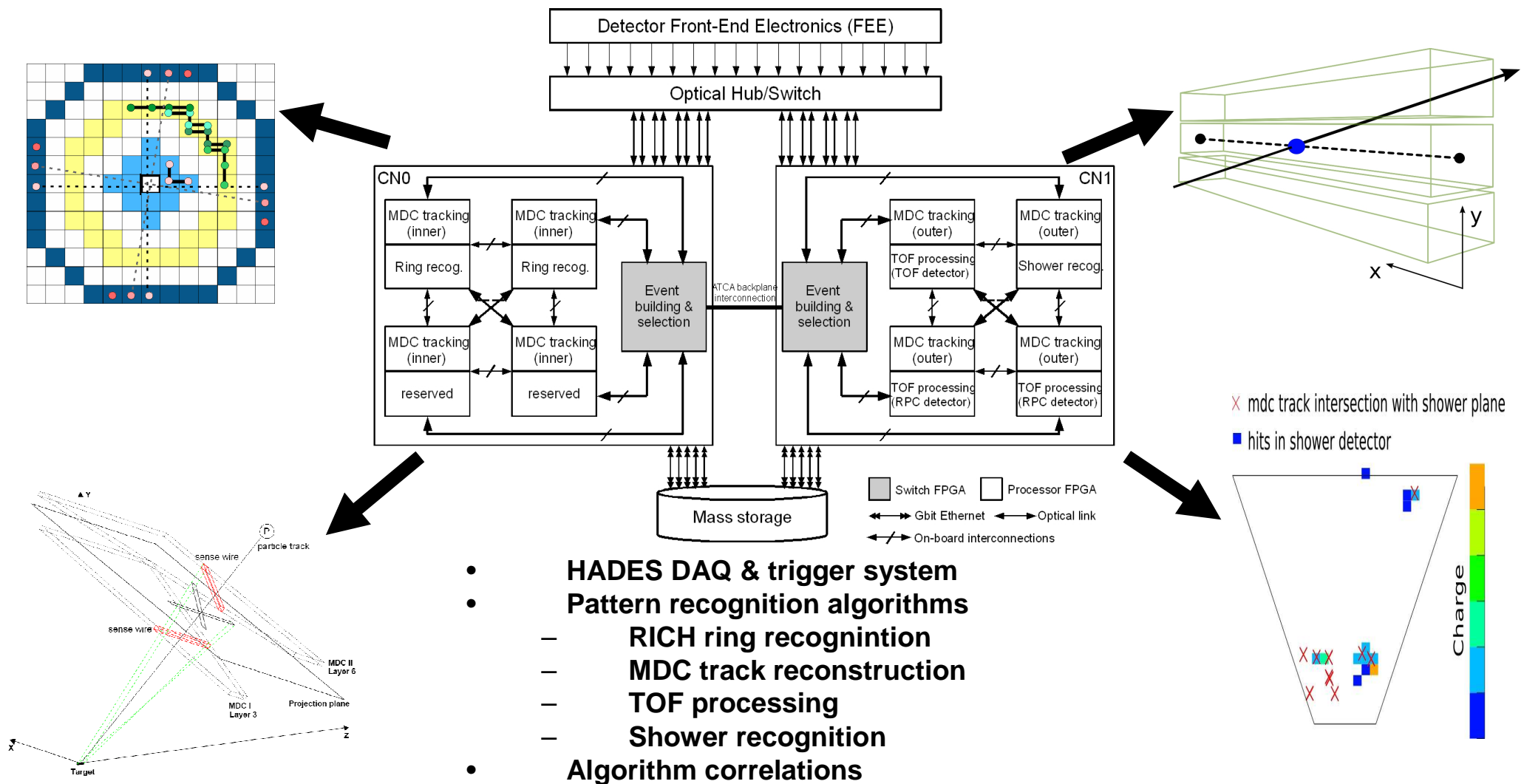
HADES @ GSI, Germany

The PANDA detector



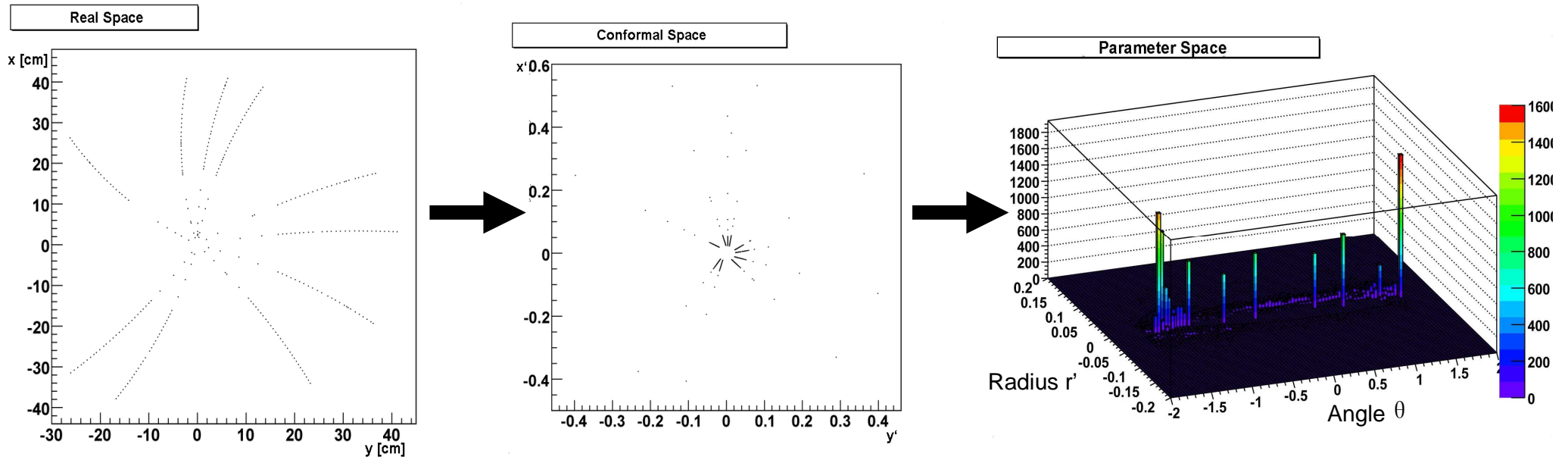
PANDA @ GSI, Germany

HADES Algorithms on FPGAs



- **HADES DAQ & trigger system**
- **Pattern recognition algorithms**
 - RICH ring recognition
 - MDC track reconstruction
 - TOF processing
 - Shower recognition
- **Algorithm correlations**

PANDA Algorithms on FPGAs



- Helix Tracking Algorithm for PANDA (circle recognition)
- Conformal transformation: circles \rightarrow lines
- Line tracking with Hough transformation
- Find peaks in parameter space for lines in conformal space
- To be implemented on FPGAs

Welcome to poster TDAP-29: Trigger Algorithm Development Based on CN