

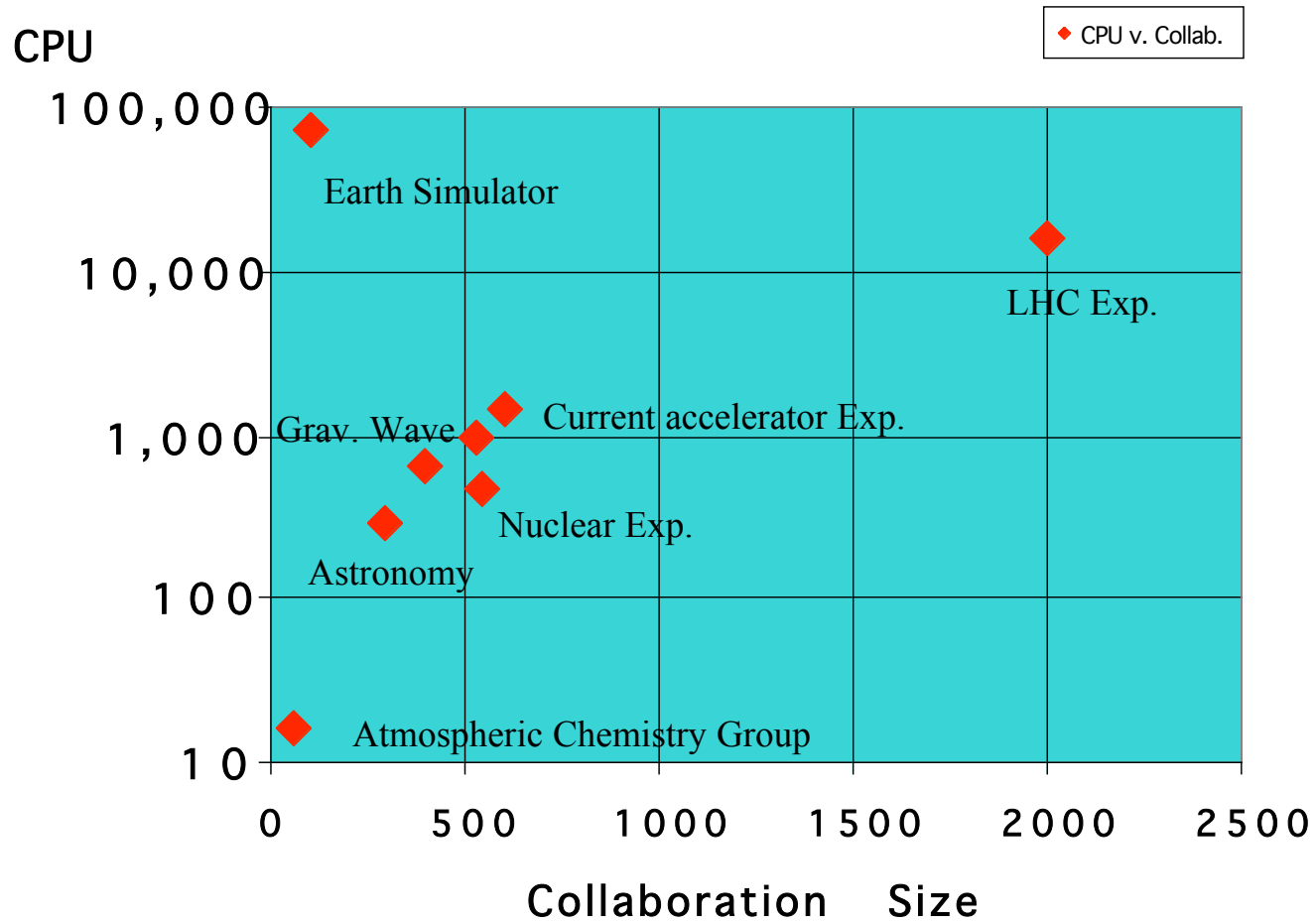
ATLAS

- Computing model:
 - Reconstruction at CERN
 - Simulation, analysis, user support in US
- Tremendous success with Grid3
 - Exploration of interoperability issues with LCG
 - See Grid3/LCG interoperability issues – solvable – but at a deep level

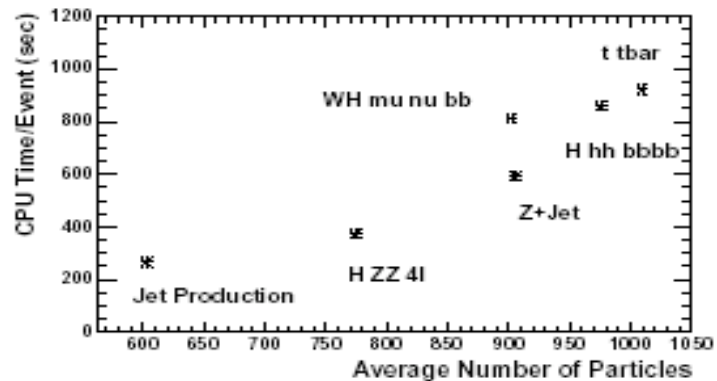
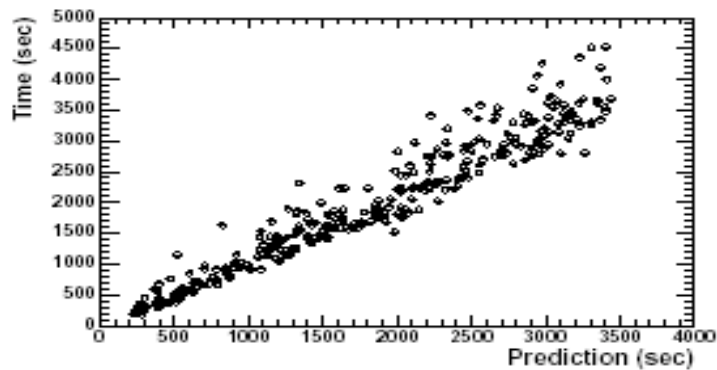
Issues for Middleware

- “Interoperability” must be planned
 - Many sites are of mixed use
 - US Open Sciences Grid (OSG), other grids
 - Requires a service based architecture
 - Advantage is that more resources are ultimately available
 - Requires up-front planning (OGSA standards)
- Transparency and uniformity of computing environment
- Memoranda of Understanding:
 - Phrased in terms of deliverables and services

CPU v. Collab.



Resource Prediction ITR



- Issue: as multiple users employ grids, resource brokering becomes important.
 - Combination of application plus resources
- Use ATLAS simulation, reconstruction at CERN and BNL to test CPU usage
- 0.96 Correlation coefficient for predictions
- Extend to simple resource broker – coordinate with Grid2003 activities