

# Metadata for fine-grained processing at ATLAS

- ▶ New parallel and opportunistic resources provide challenges and require changes to the way ATLAS handles metadata during processing.
- ▶ Three places where this is occurring.
  - ▶ Input File Splitting
  - ▶ Partial Jobs
  - ▶ Global States
- ▶ Several strategies are being pursued to address these issues.
  - ▶ Extending the supported state diagrams
  - ▶ Deferring assignment of global state to later stages.
  - ▶ Deferring summation of events, etc. to later stages.
- ▶ These changes are being developed in the ATLAS Run 2 multi-processing framework (AthenaMP), but some of the changes solve problems for the ATLAS Run 3 framework (AthenaMT) as well.

## Processing Metadata in Parallel

