

# Status of athena-based HEC and HEC-EMEC beam test software

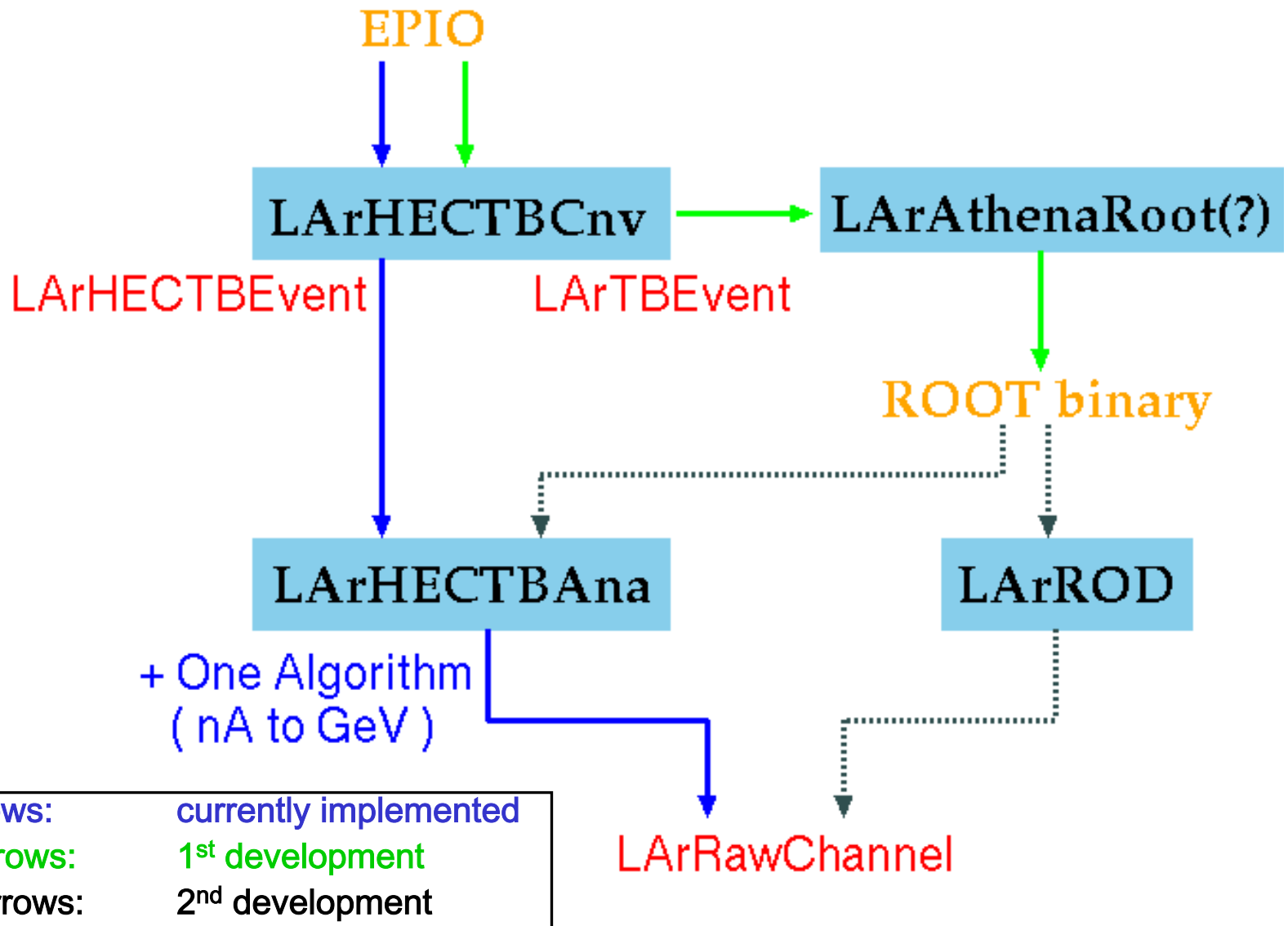
ATLAS LAr week, June 2002  
University of Victoria, Canada

## Athena Developments

- **More people are getting involved**
  - Fincke-Keeler, Kanaya, Lefebvre, McPherson
- **The goal is**
  - **to use athena 4.0.0** (current tag deadline is June 25)
  - **to analyse HEC and HEC-EMEC beam test data**
    - using athena algorithms
    - and/or using athena produced ntuple
- **Development progressing well**

# Athena Development Priorities

- **allow HEC-EMEC beam test monitoring and analysis**
  - the development of the EPIO converter requires the knowledge of the exact data format. We hope to obtain an example soon. Otherwise this will have to be finalized during the first days of beam test!!!
- **convert EPIO beam test data to persistent data format (ROOT)**
  - with the use of LArTBEvent (and the converter service to ROOT)
  - the goal is for the persistent data to be part of a (persistent!) ATLAS repository so that beam test data can be accessed in the future by athena
- **use condition database**
  - for run period dependent parameters (calibration files, weights files, timing constants, etc.)



# ROOT-based ntuple analysis

- **many people involved**
  - students: Tayfun Ince, Tamara Starke, Ian Gable
- **TBRootAna: a ROOT-based class package**
  - to analyse athena produced ntuples
  - actively being developed using HEC beam test data
  - many useful functionalities considered
    - allow the concurrent development of user algorithms
    - allow the analysis of many ntuples in sequence
  - working version already exists

<http://particle.phys.uvic.ca/~web-atlas/>

→ ATLAS Group at Victoria

→ HEC-EMEC Test Beam