

# 21st International Conference on Computing in High Energy and Nuclear Physics (CHEP2015)



Contribution ID: 208

Type: oral presentation

## The ATLAS EventIndex: architecture, design choices, deployment and first operation experience.

*Monday, 13 April 2015 15:30 (15 minutes)*

The EventIndex is the complete catalogue of all ATLAS events, keeping the references to all files that contain a given event in any processing stage. It replaces the TAG database, which had been in use during LHC Run 1. For each event it contains its identifiers, the trigger pattern and the GUIDs of the files containing it. Major use cases are event picking, feeding the Event Service used on some production sites, and technical checks of the completion and consistency of processing campaigns. The system design is highly modular so that its components (data collection system, storage system based on Hadoop, query web service and interfaces to other ATLAS systems) could be developed separately and in parallel during LS1. The EventIndex is in operation for the start of LHC Run 2. This talk describes the high level system architecture, the technical design choices and the deployment process and issues. The performance of the data collection and storage systems, as well as the query services, will be reported.

**Primary author:** Dr BARBERIS, Dario (Università e INFN Genova (IT))

**Co-authors:** FERNANDEZ CASANI, Alvaro (Instituto de Fisica Corpuscular (ES)); FAVARETO, Andrea (Università degli Studi e INFN Genova); GLASMAN, Claudia (Universidad Autonoma de Madrid); Dr MALON, David (Argonne National Laboratory (US)); GALLAS, Elizabeth (University of Oxford (GB)); PROKOSHIN, Fedor (Federico Santa Maria Technical University (CL)); Dr SALT, JOSE (IFIC-VALENCIA); Dr CRANSHAW, Jack (Argonne National Laboratory (US)); SANCHEZ, Javier (Universidad de Valencia (ES)); Dr HRIVNAC, Julius (Laboratoire de l'Accelérateur Lineaire (FR)); TOEBBICKE, Rainer (CERN); YUAN, Ruijun (Laboratoire de l'Accelérateur Lineaire (FR)); Dr GONZÁLEZ DE LA HOZ, Santiago (IFIC-Valencia)

**Presenter:** Dr BARBERIS, Dario (Università e INFN Genova (IT))

**Session Classification:** Track 3 Session

**Track Classification:** Track3: Data store and access