

## **Session Program**

**21-25 May 2012**



# **Computing in High Energy and Nuclear Physics (CHEP) 2012**

## ***Software Engineering, Data Stores and Databases***

New York City, NY, USA

# Monday 21 May

13:30

## Software Engineering, Data Stores and Databases

**Session** | **Location:** Kimmel Center, Room 802 | **Convener:** David Lange

13:30–13:55 **Cling - The LLVM-based C++ Interpreter**

**Speaker**

Vasil Georgiev Vasilev

13:55–14:20 **GOoDA: The Generic Optimization Data Analyzer**

**Speaker**

Roberto Agostino Vitillo

14:20–14:45 **Massively parallel Markov chain Monte Carlo with BAT**

**Speaker**

Frederik Beaujean

14:45–15:10 **Experiences with Software Quality Metrics in the EMI Middleware**

**Speaker**

Maria Alandes Pradillo

15:10–15:35

**Improving Software Quality of the ALICE Data-Acquisition System through Program Analysis**

**Speaker**

Mrs Jianlin Zhu

15:35

16:35

## Software Engineering, Data Stores and Databases

**Session** | **Location:** Kimmel Center, Room 802 | **Convener:** Simone Campana

16:35–17:00 **CMS experience with online and offline Databases**

**Speaker**

Dr Andreas Pfeiffer

17:00–17:25

**A Programmatic View of Metadata, Metadata Services, and Metadata Flow in ATLAS**

**Speaker**

Dr David Malon

17:25–17:50

**Comparison of the Frontier Distributed Database Caching System with NoSQL Databases**

**Speaker**

Dave Dykstra

17:50–18:15 **ATLAS DDM/DQ2 & NoSQL databases: Use cases and experiences**

**Speaker**

Mario Lassnig

18:15

## Tuesday 22 May

13:30

### Software Engineering, Data Stores and Databases

**Session** | **Location:** Kimmel Center, Room 802 | **Convener:** Benedikt Hegner

13:30–13:55 **A CMake-based build and configuration framework**

**Speaker**  
Marco Clemencic

13:55–14:20 **Tiered Storage For LHC**

**Speakers**  
Andrew Hanushevsky, Wei Yang

14:20–14:45 **Status and Future Perspectives of CernVM-FS**

**Speaker**  
Jakob Blomer

14:45–15:10 **Advanced Modular Software Performance Monitoring**

**Speaker**  
Alexander Mazurov

15:10–15:35 **Artificial Intelligence in the service of system administrators**

**Speaker**  
Christophe Haen

15:35

16:35

### Software Engineering, Data Stores and Databases

**Session** | **Location:** Kimmel Center, Room 802 | **Convener:** Simone Campana

16:35–17:00

**dCache: implementing a high-end NFSv4.1 service using a Java NIO framework**

**Speaker**  
Mr Tigran Mkrtchyan

17:00–17:25

**LCG Persistency Framework (POOL, CORAL, COOL) - Status and Outlook**

**Speaker**  
Raffaello Trentadue

17:25–17:50

**Evolution of grid-wide access to database resident information in ATLAS using Frontier**

**Speaker**  
Alastair Dewhurst

17:50–18:15

**Handling of time-critical Conditions Data in the CMS experiment - Experience of the first year of data taking**

**Speaker**  
Giacomo Govi

18:15

## Thursday 24 May

13:30

### Software Engineering, Data Stores and Databases

**Session** | **Location:** Kimmel Center, Room 802 | **Convener:** David Lange

13:30–13:55 **RooStats: Statistical Tools for the LHC**

**Speaker**

Sven Kreiss

13:55–14:20

**New software library of geometrical primitives for modelling of solids used in Monte Carlo detector simulations**

**Speaker**

Marek Gayer

14:20–14:45 **ROOT I/O in Javascript - Reading ROOT files in a browser**

**Speaker**

Bertrand Bellenot

14:45–15:10

**Designing and developing portable large-scale JavaScript web applications within the Experiment Dashboard framework**

**Speaker**

David Tuckett

15:10–15:35 **MAUS: MICE Analysis User Software**

**Speaker**

Durga Rajaram

15:35

16:35

### Software Engineering, Data Stores and Databases

**Session** | **Location:** Kimmel Center, Room 802 | **Convener:** Benedikt Hegner

16:35–17:00

**The future of commodity computing and many-core versus the interests of HEP software**

**Speaker**

Andrzej Nowak

17:00–17:25

**Development and Evaluation of Vectorised and Multi-Core Event Reconstruction Algorithms within the CMS Software Framework**

**Speaker**

Mr Thomas Hauth

17:25–17:50

**Parallelization of the AliRoot event reconstruction by performing a semi-automatic source-code transformation**

**Speaker**

Stefan Lohn

17:50-18:15

## Optimizing Python-based ROOT I/O with PyPy's Tracing JIT

### Speaker

Wim Lavrijsen

18:15