### **SCCTW'2016**

### **Report of Contributions**

Contribution ID: 1 Type: not specified

### **Challenges in Information Technology for HEP**

Tuesday 4 October 2016 11:00 (40 minutes)

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

Session Classification: Plenary: Big Data Processing

Contribution ID: 2 Type: not specified

### The CMS Offline Software and Computing System

Tuesday 4 October 2016 11:40 (40 minutes)

Presenter: LANGE, David (Princeton University (US))

Session Classification: Plenary: Big Data Processing

Contribution ID: 3 Type: not specified

## A Monte-Carlo Algorithm for Finding a Near Optimal Rearrangement of the Steinitz Functional

Tuesday 4 October 2016 12:20 (40 minutes)

Presenter: CHOBANIAN, Sergei (GTU)

Session Classification: Plenary: Big Data Processing

Contribution ID: 4 Type: **not specified** 

#### **ATLAS Outreach Highlights**

Thursday 6 October 2016 10:00 (30 minutes)

Presenter: CHEATHAM, Susan (Universita degli Studi di Udine (IT))

Session Classification: Plenary: Outreach and LHC Upgrade Technologies

Contribution ID: 5 Type: **not specified** 

#### Art@CMS sciART Exhibitions and Workshops

Thursday 6 October 2016 10:30 (30 minutes)

Presenter: HOCH, Michael (Austrian Academy of Sciences (AT))

Session Classification: Plenary: Outreach and LHC Upgrade Technologies

Contribution ID: 6 Type: **not specified** 

#### **ATLAS Simulation**

Thursday 6 October 2016 11:00 (30 minutes)

Presenter: MEYER, Jochen (Nikhef National institute for subatomic physics (NL))

Session Classification: Plenary: Outreach and LHC Upgrade Technologies

Contribution ID: 7 Type: **not specified** 

#### **GTU-ATLAS Collaboration Landscape**

Thursday 6 October 2016 11:30 (30 minutes)

Presenter: SHARMAZANASHVILI, Alexander (Georgian Technical University (GE))

Session Classification: Plenary: Outreach and LHC Upgrade Technologies

Contribution ID: 8 Type: not specified

### **Evolution of Distributed Computing for the ATLAS Experiment at CERN**

Friday 7 October 2016 10:00 (45 minutes)

Presenter: DI GIROLAMO, Alessandro (CERN)

Session Classification: Plenary: Grid Computing

Contribution ID: 9

Type: not specified

#### **Networks for the LHC Data Challenge**

Friday 7 October 2016 10:45 (45 minutes)

Presenter: MARTELLI, Edoardo (CERN)

Session Classification: Plenary: Grid Computing

Contribution ID: 10 Type: not specified

## On One Nonlocal Contact Problem for Elliptic Equation and its Numerical Solution

*Tuesday 4 October 2016 14:30 (20 minutes)* 

Presenters: MELADZE, H.; DAVITASHVILI, T.

Session Classification: Mathematical Methods and Algorithms for Distributing Comput-

ing

Contribution ID: 11 Type: not specified

### On Calculation of the Inverse of Multidimensional Harmonic Oscillator on Schwartz Space

*Tuesday 4 October 2016 14:50 (20 minutes)* 

Presenters: UGULAVA, D.; ZARNADZE, D.; KUBLASHVILI, M.; TSERETELI, P.

Session Classification: Mathematical Methods and Algorithms for Distributing Comput-

ing

Contribution ID: 12 Type: not specified

### On Some Applications of Hadamard Matrices

Tuesday 4 October 2016 15:10 (20 minutes)

Presenters: GIORGOBIANI, G.; MENTESHASHVILI, M.; KVARATSKHELIA, V.

Session Classification: Mathematical Methods and Algorithms for Distributing Comput-

ing

Contribution ID: 13 Type: not specified

#### **Computational Aspects of a Discrete Extremum**

Tuesday 4 October 2016 15:30 (20 minutes)

Presenter: TARIELADZE, V.

Session Classification: Mathematical Methods and Algorithms for Distributing Comput-

ing

Contribution ID: 14 Type: not specified

### Mathematical Modeling of Immunopathogenesis of Rheumatoid Arthritis

*Tuesday 4 October 2016 15:50 (20 minutes)* 

Presenters: ODISHARIA, K.; JANIKASHVILI, N.; TSERETELI, P.; ODISHARIA, V.

Session Classification: Mathematical Methods and Algorithms for Distributing Comput-

ing

Contribution ID: 15

Type: not specified

# On Solving the Dirichlet Generalized Problem for a Harmonic Function in the Case of an Infinite Plane with a Crack-Type Cut

Tuesday 4 October 2016 16:30 (20 minutes)

Presenters: KUBLASHVILI, M.; ZAKRADZE, M.; KOBLISHVILI, N.; SANIKIDZE, Z.

Session Classification: Mathematical Methods and Algorithms for Distributing Comput-

ing

Contribution ID: 16 Type: not specified

## Symbolic Estimation of Distances Between Eigenvalues of Hermitian Operator

Tuesday 4 October 2016 16:50 (20 minutes)

Presenters: LOMIDZE, I.; CHACHAVA, N.

Session Classification: Mathematical Methods and Algorithms for Distributing Comput-

ing

Contribution ID: 17 Type: not specified

# Approximation with respect to the spatial variable of the solution of a nonlinear dynamic beam problem

Tuesday 4 October 2016 17:10 (20 minutes)

**Presenters:** PERADZE, J.; KALICHAVA, Z.

Session Classification: Mathematical Methods and Algorithms for Distributing Comput-

ing

Contribution ID: 18 Type: not specified

# On construction and application of some quadrature formulas of high accuracy for Cauchy type singular integrals

Tuesday 4 October 2016 17:30 (20 minutes)

Presenters: SANIKIDZE, J.; KUBLASHVILI, M.

Session Classification: Mathematical Methods and Algorithms for Distributing Comput-

ing

Contribution ID: 19 Type: not specified

### **Leavingstone Digital Creative Agency**

Thursday 6 October 2016 14:00 (20 minutes)

**Presenter:** VAKHTANGISHVILI, V.

Session Classification: Outreach Projects

Contribution ID: 20 Type: not specified

#### Expression Methods in Art@Science

Thursday 6 October 2016 14:20 (20 minutes)

**Presenter:** MIRZIASHVILI, K.

Session Classification: Outreach Projects

Contribution ID: 21 Type: not specified

### **The Concept of ATLAS Tracer**

Thursday 6 October 2016 14:40 (20 minutes)

Presenter: UDZILAURI, N.

Session Classification: Outreach Projects

Contribution ID: 22 Type: not specified

## Development of Event Visualization Methodes for ATLAS Tracer Software Application

Thursday 6 October 2016 15:00 (20 minutes)

**Presenter:** PHATARIDZE, L.

Session Classification: Outreach Projects

Contribution ID: 23 Type: not specified

## **Development of Simplified Geometry Descriptions of ATLAS Detector for Tracer Software Application**

Thursday 6 October 2016 15:20 (20 minutes)

Presenter: KOBAKHIDZE, Sh.

Session Classification: Outreach Projects

Contribution ID: 24 Type: not specified

### **ATLAS Tracer Engine and Functionalities**

Thursday 6 October 2016 15:40 (20 minutes)

**Presenter:** VARAMASHVILI, D.

Session Classification: Outreach Projects

Contribution ID: 25 Type: not specified

#### Investigation of Geometry Descriptions of End-Cap Toroid Magnet for ATLAS Simulation Software Infrastructure

Thursday 6 October 2016 16:20 (20 minutes)

**Presenter:** KEKELIA, B.

Session Classification: LHC Upgrade Technologies

Contribution ID: 26

Type: not specified

## Development of Analysis and Synthesis Methods for Geometry Modeling of ATLAS Detector

Thursday 6 October 2016 16:40 (20 minutes)

**Presenter:** SURMAVA, A.

Session Classification: LHC Upgrade Technologies

Contribution ID: 27 Type: not specified

#### **Geometry Creation Methodologies for LHC Point 4**

Thursday 6 October 2016 17:00 (20 minutes)

**Presenter:** SHEKILADZE, D.

Session Classification: LHC Upgrade Technologies

Contribution ID: 28 Type: not specified

### **ATLAS Tile Calorimeter Upgrade**

Thursday 6 October 2016 17:20 (20 minutes)

**Presenter:** MKRTCHYAN, T.

Session Classification: LHC Upgrade Technologies

Contribution ID: 29 Type: not specified

### Investigation of Geometry Modeling Methods for ATLAS Simulation

Thursday 6 October 2016 17:40 (20 minutes)

Presenter: TSUTSKIRIDZE, N.

Session Classification: LHC Upgrade Technologies

Contribution ID: 30 Type: not specified

### **Concept of Cloud Computing**

Friday 7 October 2016 14:00 (20 minutes)

Presenter: ABULADZE, I.

Session Classification: Cloud Projects in Armenia-Azerbaijan-Georgia

Contribution ID: 31 Type: not specified

### Modeling of spin glasses from the first principles of classical mechanics

Friday 7 October 2016 14:20 (20 minutes)

Presenters: GEVORKYAN, A.; SAHAKYAN, V.

Session Classification: Cloud Projects in Armenia-Azerbaijan-Georgia

Contribution ID: 32 Type: not specified

### **Cloud Computing Technology in Armenia**

Friday 7 October 2016 14:40 (20 minutes)

**Presenter:** ASTSATRYAN, H.

Session Classification: Cloud Projects in Armenia-Azerbaijan-Georgia

Contribution ID: 33 Type: not specified

### Some Scheduling Algorithms for Computational Grid Systems

Friday 7 October 2016 15:00 (20 minutes)

Presenter: SAHAKYAN, V.

Session Classification: Cloud Projects in Armenia-Azerbaijan-Georgia

Contribution ID: 34

Type: not specified

## Design of a Cyber Infrastructure for Accumulation and Distribution of Analytical Information Resource

Friday 7 October 2016 15:20 (20 minutes)

Presenter: GHLONTI, G.

Session Classification: Cloud Projects in Armenia-Azerbaijan-Georgia

Contribution ID: 35

Type: not specified

#### Modern Supercomputers, Georgian Supercomputer Project and Usage Areas

Friday 7 October 2016 16:00 (20 minutes)

**Presenters:** PRANGISHVILI, A.; OIKASHVILI, B.; MODEBADZE, Z.

Session Classification: Grid Cluster at GTU: Development and Perspectives

Contribution ID: 36 Type: not specified

#### An Algorithm for Distributing Jobs in Cluster Environment

Friday 7 October 2016 16:20 (20 minutes)

Presenters: MAMPORIA, B.; CHELIDZE, G.; VAKHANIA, N.

**Session Classification:** Grid Cluster at GTU: Development and Perspectives

Contribution ID: 37 Type: **not specified** 

# The Algorithm of Parallel Programming Using "Small Delay"

Friday 7 October 2016 16:40 (20 minutes)

Presenters: SHETSIRULI, L.; PKHOVELISHVILI, M.; ARCHVADZE, N.; IOSELIANI, O.

Session Classification: Grid Cluster at GTU: Development and Perspectives

Contribution ID: 38 Type: not specified

### Circulation Physical Fundamentals of Computing and Technologies

Friday 7 October 2016 17:00 (20 minutes)

Presenter: ASATIANI, P.

Session Classification: Grid Cluster at GTU: Development and Perspectives

Contribution ID: 39 Type: not specified

#### **New Tweakable Block Cipher**

Friday 7 October 2016 17:20 (20 minutes)

**Presenter:** JULAKIDZE, L.

Session Classification: Grid Cluster at GTU: Development and Perspectives

Contribution ID: 40 Type: not specified

### On Modeling of the Turbulent Movement

Friday 7 October 2016 17:40 (20 minutes)

**Presenter:** MAMPORIA, B.

Session Classification: Grid Cluster at GTU: Development and Perspectives