

International Conference on Advanced Scientific Computing



Report of Contributions

Contribution ID: 23

Type: **not specified**

Accurate data identification in low signal-to-noise ratio series

Presenters: BARNOVICIU, Eduard (UTI GRUP, UPB); GHENESCU, Marian (UTI GRUP, UPB); CHINDEA, Mihai (UTI GRUP); GHENESCU, Oana (ISS); MIHAESCU, Roxana (UTI GRUP, ISS); CARATA, Serban (UTI GRUP, UPB)

Contribution ID: 24

Type: **not specified**

The CPC Program Library: 50 years of open-source software in computational physics

Presenter: SCOTT, Stan (Queen's University Belfast)

Contribution ID: 25

Type: **not specified**

Overview of JINR computing infrastructure

Presenters: DOLBLOV, Andrey (JINR); PODGAINIY, Dmitry (JINR); ADAM, Gheorghe (JINR, IFIN-HH); KUTOVSKY, Nikolay (JINR); VOYTISHIN, Nikolay (JINR); STRIZH, Tatiana (JINR); MITSYN, Valery (JINR); KORENKOV, Vladimir (JINR)

Contribution ID: 26

Type: **not specified**

Romanian NREN – support for Romanian Research facilities

Presenters: PINZARU, Ciprian (UAIC); RUSU, Octavian (ARNIEC/RoEduNet, UAIC); GASNER, Paul (ARNIEC/RoEduNet, UAIC); VRACIU, Valeriu (ARNIEC/RoEduNet, UAIC)

Contribution ID: 27

Type: **not specified**

Status and prospects of ATLAS (FR Cloud) computing

Presenter: DERUE, Frédéric (LPNHE-CNRS/IN2P3)

Contribution ID: 28

Type: **not specified**

ALICE Grid Computing resources utilization report and plans for Run 3

Presenters: GRIGORAS, Costin (CERN); BETEV, Latchezar (CERN)

Contribution ID: 29

Type: **not specified**

Real-time conditions data distribution for the Online data processing of the ALICE experiment

Presenters: GRIGORAS, Costin (CERN); DOSARU, Daniel-Florin (UPB); CARABAS, Mihai (UPB); TAPUS, Nicolae (UPB)

Contribution ID: 30

Type: **not specified**

Data Management services in highly distributed environments: recent achievements of the eXtreme-DataCloud project

Presenter: CESINI, Daniele (INFN-CNAF)

Contribution ID: 31

Type: **not specified**

Monitoring of exascale data processing

Presenters: PETCU, Dana (UVT); IUHASZ, Gabriel (IEAT)

Contribution ID: 32

Type: **not specified**

Jupyter Notebooks as scientific gateways to access cloud computing and distributed storage

Presenter: AGUILAR, Fernando (IFCA-CSIC)

Contribution ID: **33**

Type: **not specified**

RO-07-NIPNE in the perspective of the Run 3

Contribution ID: 34

Type: **not specified**

Deployment and maintenance of an XRootD storage cluster for ALICE

Presenter: SEVCENCO, Adrian (ISS)

Contribution ID: 35

Type: **not specified**

EOS deployment at the RO-03-UPB Grid site

Presenters: CARABAS, Costin (UPB); CARABAS, Mihai (UPB); TAPUS, Nicolae (UPB)

Contribution ID: 36

Type: **not specified**

Migration of the UAIC Grid site in a new configuration

Presenters: PINZARU, Ciprian (UAIC); RUSU, Octavian (RoEduNet); GASNER, Paul (RoEduNet); VRACIU, Valeriu (RoEduNet)

Contribution ID: 37

Type: **not specified**

Contribution of the RO-14-ITIM Grid site to ATLAS computing: recent upgrades

Presenters: STEFAN, Albert (INCDTIM); FARCAS, Felix (INCDTIM); NAGY, Jefte (INCDTIM); TRUSCA, Radu (INCDTIM)

Contribution ID: **38**

Type: **not specified**

User-friendly expressions for the coefficients in exponential fitting

Presenter: IXARU, Liviu Gr. (IFIN-HH, Academy of Romanian Scientists)

Contribution ID: 39

Type: **not specified**

Problem-dependent discretizations of evolutionary problems

Presenters: PATERNOSTER, Beatrice (University of Salerno); CONTE, Dajana (University of Salerno); D'AMBROSIO, Raffaele (University of L'Aquila)

Contribution ID: 40

Type: **not specified**

Quantum-quasiclassical model for calculation of resonant processes in hybrid atom-ion traps

Presenter: MELEZHIK, Vladimir (JINR, RUDN University)

Contribution ID: 41

Type: **not specified**

Adapted two step peer methods for advection diffusion problems

Presenters: PATERNOSTER, Beatrice (University of Salerno); CONTE, Dajana (University of Salerno); MOHAMADI, Fakhroddin (University of Hormozgan); MORADI, Leila (University of Hormozgan)

Contribution ID: 42

Type: **not specified**

Challenges in Mathematical Modeling and Computational Physics in LIT-JINR on 2020–2023

Presenters: ADAM, Gh. (JINR, IFIN-HH); BUŠA, J. (JINR, Technical University of Košice); CHULU-UNBAATAR, O. (JINR); ZRELOV, P. (JINR)

Contribution ID: 43

Type: **not specified**

Analyzing Data generated by the High Power Laser System in ELI-NP

Presenters: DE BOISDEFFRE, Bertrand (ELI-NP/IFIN-HH); KOLLIPOULOS, Georgios (ELI-NP/IFIN-HH)

Contribution ID: 44

Type: **not specified**

Cluster monitoring system of the Multifunctional Information and Computing Complex (MICC) LIT

Presenters: DOLBILOV, A. (JINR); GOLUNOV, A. (JINR); KASHUNIN, I. (JINR); STRIZH, T. (JINR); KORENKOV, V. (JINR); MITSYN, V. (JINR)

Contribution ID: 45

Type: **not specified**

A Research Management System based on Rdf Graphs

Presenters: MOCEAN, Loredana (UBB); VLAD, Miranda-Petronella (UCDC)

Contribution ID: 46

Type: **not specified**

Cloud computing, HTC, and HPC services at NGI-RO

Contribution ID: 47

Type: **not specified**

A tribute to Liviu Ixaru, developer of successful CP-algorithms

Presenters: VAN DAELE, Marnix (Ghent University); BAEYENS, Toon (Ghent University)

Contribution ID: 48

Type: **not specified**

Solving Quasi-exactly solvable differential equation by a canonical polynomials approach

Presenter: EL-DAOU, Mohamad K. (College of Technological Studies)

Contribution ID: 49

Type: **not specified**

Finite Element Method and Programs for Investigation of Quantum Few-Body Systems

Presenters: GÓZDŹ, A. (Institute of Physics University of M. Curie-Skłodowska); GUSEV, A.A. (JINR, Dubna State University); CHULUUNBAATAR, G. (JINR, Peoples' Friendship University of Russia Moscow); HAI, L.L. (Ho Chi Minh city University of Education); CHULUUNBAATAR, O. (JINR, Institute of Mathematics National University of Mongolia); WEN, P. W. (JINR, China Institute of Atomic Energy); KRASSOVITSKIY, P.M. (Institute of Nuclear Physics); NAZMITDINOV, R. G. (JINR, Dubna State University); VINITSKY, S.I. (JINR, Peoples' Friendship University of Russia Moscow); DERBOV, V.L. (Saratov State University)

Contribution ID: 50

Type: **not specified**

Algorithms for Generating in Analytical Form Interpolation Hermite Polynomials in Hypercube

Presenters: GÓZDŹ, A. (Institute of Physics University of M. Curie-Skłodowska); GUSEV, A.A. (JINR); CHULUUNBAATAR, G. (JINR, Peoples' Friendship University of Russia Moscow); HAI, L.L. (Ho Chi Minh city University of Education); CHULUUNBAATAR, O. (JINR, Institute of Mathematics National University of Mongolia); KRASSOVITSKIY, P.M. (Institute of Nuclear Physics); VINITSKY, S.I. (JINR, Peoples' Friendship University of Russia Moscow); LUA, T.T. (Ho Chi Minh city University of Education); DERBOV, V.L. (Saratov State University)

Contribution ID: 51

Type: **not specified**

PySlise: a Python Package for solving Schrödinger Equations

Presenters: VAN DAELE, Marnix (Ghent University); BAEYENS, Toon (Ghent University)

Contribution ID: 52

Type: **not specified**

Modelling high precision spectroscopy experiments

Presenter: BAKALOV, Dimitar (Bulgarian Academy of Sciences)

Contribution ID: 53

Type: **not specified**

Gibbs Phenomenon in Clenshaw-Curtis Quadrature

Presenters: ADAM, Gheorghe (JINR, IFIN-HH); ADAM, Sanda (JINR, IFIN-HH)

Contribution ID: 54

Type: **not specified**

Application of the fragment molecular orbital method to the investigation of antimicrobial peptides interaction with membrane models

Presenters: NECULA, George (IFIN-HH); JANOSI, Lorant (ITIM); BACALUM, Mihaela (IFIN-HH); RADU, Mihai (IFIN-HH)

Contribution ID: 55

Type: **not specified**

Molecular dynamics simulations on the interaction between a silver nanoparticle and lipid monolayers

Presenters: MIHAILESCU, Dan Florin (UNIBUC); VASILE, Ionut (IFIN-HH); MERNEA, Maria (UNIBUC); CALBOREAN, Octavian (UNIBUC); AVRAM, Speranta (UNIBUC)

Contribution ID: 56

Type: **not specified**

Distributed bioinformatics analyses on an SGE cluster, for variant calling on bovine whole-genome samples

Presenters: MIZERANSCHI, Alexandru Eugeniu (Research and Development Station for Bovine - Arad); MIHALI, Ciprian Valentin (Research and Development Station for Bovine - Arad); ILIE, Daniela Elena (Research and Development Station for Bovine - Arad); CARABAS, Mihai (UPB); NEAMT, Radu Ionel (Research and Development Station for Bovine - Arad)

Contribution ID: 57

Type: **not specified**

Evolution of quantum correlations in Gaussian bosonic channels

Presenter: ISAR, Aurelian (IFIN-HH)

Contribution ID: 58

Type: **not specified**

The quantum dynamics of a two-qubit pair longitudinally coupled with a single-mode boson field

Presenters: ISAR, Aurelian (IFIN-HH); CECOI, Elena (Institute of Applied Physics); MACOVEI, Mihai A. (Institute of Applied Physics); CIORNEA, Viorel (Institute of Applied Physics)

Contribution ID: 59

Type: **not specified**

Uhlmann Fidelity of Two Bosonic Modes in a Thermal Bath

Presenters: ZUBAREV, Alexei (UNIBUC, INFLPR); ISAR, Aurelian (IFIN-HH, UNIBUC); CUZMIN-SCHI, Marina (IFIN-HH, UNIBUC)

Contribution ID: **60**

Type: **not specified**

Lasing and cooling effects of a quantum oscillator coupled with a three-level lambda - type system

Presenters: MIRZAC, Alexandra (Institute of Applied Physics); MACOVEI, Mihai A. (Institute of Applied Physics)

Contribution ID: 61

Type: **not specified**

Fidelity of teleportation for two mode Gaussian resource states in a thermal bath

Presenters: ZUBAREV, Alexei (INFLPR, UNIBUC); ISAR, Aurelian (IFIN-HH, UNIBUC); CUZMIN-SCHI, Marina (IFIN-HH, UNIBUC)

Contribution ID: 62

Type: **not specified**

Representing Character Sequences as Sets. A simple and intuitive string encoding algorithm for text data cleaning

Presenter: MARINOV, Martin (Technical University of Sofia)

Contribution ID: 63

Type: **not specified**

Speeding up atomistic DFT simulations by machine learning methods

Presenters: NEMNES, George Alexandru (IFIN-HH, UNIBUC); MITRAN, Tudor Luca (IFIN-HH)

Contribution ID: 64

Type: **not specified**

Software developments for experimental data processing in NICA projects

Presenters: KAPISHIN, Mikhail (JINR); VOYTISHIN, Nikolay (JINR); PANIN, Valery (CEA); LENIVENKO, Vasilisa (JINR); PALICHIK, Vladimir (JINR)

Contribution ID: 65

Type: **not specified**

Improving cooling by airflow control inside Data Center - model and simulation

Presenters: FARCAS, Felix (INCDTIM); NAGY, Jefe (INCDTIM); TRUSCA, Mihail-Radu-Catalin (INCDTIM); ALBERT, Stefan (INCDTIM)

Contribution ID: 66

Type: **not specified**

Detection and Validation of Asteroids using the NEARBY Software Platform

Presenter: BOLDEA, Afrodita Liliana (IFIN-HH)

Contribution ID: 70

Type: **not specified**

Development of cloud computing, HTC, and HPC services at NGI-RO

Presenters: CIOBANU-ZABET, Dragos (IFIN-HH); VASILE, Ionut (IFIN-HH); DULEA, Mihnea (IFIN-HH)

Contribution ID: 71

Type: **not specified**

Overview of JINR computing infrastructure - Part One: Past and Present

Presenters: DOLBILOV, Andrei (LIT JINR); PODGAINY, Dmitry (LIT JINR); ADAM, Gheorghe (LIT JINR, IFIN-HH); KUTOVSKY, Nikolay (LIT JINR); VOYTSHIN, Nikolay (LIT JINR); STRIZH, Tatiana (LIT JINR); MITSYN, Valery (LIT JINR); KORENKOV, Vladimir (LIT JINR)