

CSC2014 PARTICIPANTS

AHN Sang Un



Korea Institute of Science and Technology Information - Korea

I am a senior researcher at Korea Institute of Science and Technology Information (KISTI) which is a national laboratory specialized to Information Technology. I completed my PhD in physics working in Muon project in ALICE experiment. During my Master's and PhD's course, I developed a dashboard for the shifters showing the status of data acquisition from Muon detector by decoding raw signals on the fly. After the PhD, I joined a department at KISTI establishing a new Tier-1 for the first time in WLCG as a grid site administrator and a contact person to ALICE community. I am familiar with C/C++ and Bash and my current interest is puppet and virtualization.

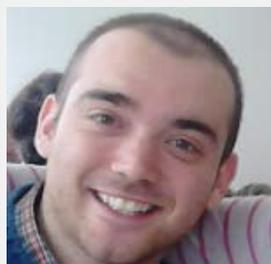
ALATAWI Mansour Salman



University of Tabuk - Saudi Arabia

My name is Mansour Salman Altawi and I was born in the city of Tabuk in Saudi Arabia. I graduated on June 2013, as Bachelor of Science holder, at the University of Tabuk. I will start soon a master program at the Max Planck institute of Physics (MPP) at Munich, Germany, majoring in particle physics. I am now involved in the particle physics group, at the University of Tabuk, active at Belle and Belle II experiments, KEK center, Japan. My main tasks were to test Silicon PhotoMultipliers (SiPMs) for the Large Angle Beamstrahlung Monitor (LABM) to be installed soon at the SuperKEKB accelerator at KEK. I am planning now to be involved in the Belle II PiXel Detector (PXD) that will be my main topic for my master research project and also for my PhD at MPP.

ANDERLINI Lucio



INFN e Università, Firenze - Italy

I am a Ph.D. student in Physics at the University of Florence, Italy. As a member of the LHCb Collaboration I devoted most of my time to data analysis, with contributions in the characterization of the Bc meson. I spent one year at CERN where I played the role of interface between the computing production group and the b-physics analysis working group. Being a geek, I am used to push new computing technologies and ideas into our analysis code. I am an experienced C/C++ and python developer, and I am familiar with multi-core heterogeneous architectures. Recently, I have started playing with web technologies (JavaScript, PHP, CGI) to develop simple user interfaces for monitoring and validation tasks.

APARICIO COTARELO Borja



CERN, Geneva - Switzerland

After completing my Computer Sciences studies in Spain and have been working for a year there other than a few internships, I came to CERN as a Technical Student where I joined the IT-DB group, Infrastructure and Middleware section. There I get involved in the maintenance and evolution of the CERN IT-DB services management system. This system consolidates the services related information into an extensible LDAP directory with the associated applications and management tools and integrates disparate information sources used to configure middleware, web server and database services. Also the integration of the system in the Agile Infrastructure framework, based on Puppet, was a key achievement. Nowadays I am part of IT-PES group, Infrastructure Services section, where I joined the Version Control and Issue Tracking Systems team. Our main task is provide the CERN community with the SVN and GIT based services for version control of source code and Atlassian JIRA and a set of services part of the Atlassian stack for issue tracking.

More recently, I am highly involved in the design and implementation of a new version control and code review service based on GitLab CE.

ARAQUE ESPINOSA Juan Pedro



LIP-Minho, Braga - Portugal

I did my Physics degree and master in advance method and techniques for physics in Universidad de Granada (Spain). I moved to Braga (Portugal) to start my PhD as part of LIP. My PhD work is focused on search of new heavy quarks with vector-like nature using data collected by the ATLAS experiment.

I have always loved everything related with computing and technology and I was first introduced to programming when I was 13. Since then I have tried to learn everything that I could, a hobby that came very handy given that as a particle physicist computing is a big part of the job.

BANERJEE Dipanwitha

ETH, Zurich - Switzerland



I am currently working in ETH,Zurich as a PhD student in the Gbar project. My work includes designing and testing the tracker for anti-hydrogen free fall measurement. Simulations were carried in Geant4 to estimate the resolution and geometry of the tracker given the mechanical constraints. Given the resolution requirements X-Y Microstrip Micromegas modules have been decided to be used for tracking. I have already tested a prototype at the test bench we built at ETH Zürich.

I did my Masters in Physics from University of Sussex, Brighton, UK before this and my Master's thesis was on dynamic shielding in the nEDM experiment. I tested a superconducting shield made of solenoid and lead against varying magnetic fields.

BANNOURA Arwa

Bergische Universität Wuppertal - Germany



I am currently a PhD student working with the experimental particle physics group at the University of Wuppertal in Germany. I am doing physics analysis with the ATLAS experiment at CERN. After finishing my Bachelor studies in Physics from Birzeit University in Palestine, I participated at CERN summer school in 2008. For my graduate studies, I joined the master program "Computer Simulation in Science" at the University of Wuppertal. From my studies, I am familiar with C, C++, JAVA, ROOT, Python, OpenMPI.

BJELOGRLIC Sandro

NIKHEF Utrecht University - Netherlands



After completing my BSc and MSc studies in Trieste, Italy, I moved to the Netherlands and started my PhD at the Utrecht University.

Since then I am a member of the ALICE collaboration and the focus of my project is on the production of heavy flavour (D) mesons within jets. This study can provide deep information on the interaction of heavy quarks with the Quark Gluon Plasma, which is believed to be formed in heavy-ion collisions.

On a daily basis I use C/C++ and (Ali) Root and I am somewhat familiar with Mathematica and Fortran.

Besides work, I have many hobbies, and in particular I enjoy volleyball, cycling and photography.

BRONDOLIN Erica

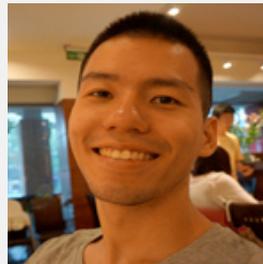
HEPHY, Vienna - Austria



Erica Brondolin was born in 1989 in Gallarate, a town near Milan, Italy. Physics and foreign languages have always been her main interests. After having completed her secondary school education with a diploma in Segretaria di Azienda Corrispondente Lingue Estere, she has joined the physics courses at the University of Milano-Bicocca in 2008. For her bachelor thesis in 2011, she has chosen to work on the estimation of electrons and positrons acceptance, within the AMS-02 experiment. Since she has really enjoyed that experience, she has continued her studies in particle physics. In 2013, when all the world was paying attention to the discovery of the Higgs boson, she has join the CMS collaboration for her Master Thesis giving an important contribution to the analysis of the Higgs decay into two photons. In 2014, she has started her PhD Thesis in the High Energy Physics Institute in Vienna.

CHAO Cheng-Hsi

Academia Sinica Grid Computing Centre, Taipei - Taiwan



I graduated from National Taiwan University with a bachelor's degree in Physics and work as a Software & System Engineer at Academia Sinica Grid Computing Centre in Taiwan on software deployment automation and distributed data management of our storage systems.

Currently I am at CERN on collaboration with the ATLAS Rucio team of ATLAS PH-ADP-CO Department with the aim of using Rucio to support AMS jobs, optimize data integrity and also the integration of Rucio with object storage support on Ceph.

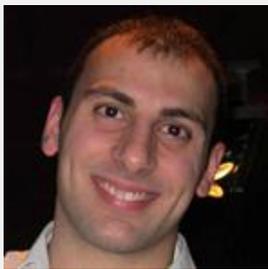
I am acquainted with UNIX & LINUX systems and Python, with understanding and experience with C++.

CROFT Vincent Alexander**NIKHEF / RU-Nijmegen - Netherlands**

I completed my bachelor studies at the Niels Bohr institute in Copenhagen working with TauTriggers in the ATLAS experiment. I then travelled to DESY in Hamburg to again work with MySQL information management for the ATLAS trigger system. I next returned to London to complete the 7+2 month UK masters with a thesis on Multivariate Analysis for particle searches. I supplemented my studies with dedicated masters in particle physics with Ecole Polytechnique in Paris with a thesis on Bayesian clustering at the ILC. I developed novel combinatoric algorithms for searches for exotic physics with CMS at CERN in Geneva before starting a PhD on Higgs physics with the ATLAS experiment in the Netherlands. In the last two years I have worked on MVA for H->WW, embedding corrections for H->WW, fast calorimeter simulation for taus, tau substructure resolution, Data reduction and processing for H->tautau.

DENIS Marek**CERN, Geneva - Switzerland**

I am a software engineer working on a joint project along with Rackspace. As a daily job I am contributing to the OpenStack project, focusing on Identity Federation. So far first of two identified usecases has been implemented in the newest OpenStack release - IceHouse, whereas second one is a work in progress. I graduated from Warsaw University of Technology. Before my work at CERN I had a chance to successfully participate in the Google Summer of Code programme as well as worked for telecommunications company on VoIP platforms.

DI MARIA Riccardo**Alma Mater Studiorum, University of Bologna - Italy**

I am a student attending the Master of Physics Program, specializing in Particle Physics, at Alma Mater Studiorum, University of Bologna. In March of 2013, I obtained my Bachelor Degree in Physics, with a thesis on the Hawking Radiation and the Tunnel Effect. This was also a direct result of collaboration with the Theoretical Group of Bologna. Furthermore, since I am in collaboration with the CMS Group of Bologna, the topics of my Master Degree refers to Grid/Cloud Computing and LHC Run-II upgrades in relation to High Energy Physics. I am working within the "Dynamic Resource Provisioning" project of the CMS Computing team; in particular, I am developing techniques for the integration of cloud resources into the overall CMS computing infrastructure, and their proficient utilization to serve the needs of the CMS workflows.

FERNANDEZ ALVAREZ Luis**CERN, Geneva - Switzerland**

Graduated in Computer Engineering from University of Oviedo, I started my career as research engineer in the Project Engineering Area of the University of Oviedo. Since September 2012, I have been working as a Fellow at CERN in the Cloud Infrastructure team, responsible of the OpenStack service. I've been responsible of the deployment and development of Windows hypervisors in the OpenStack environment. This involves working with upstream teams, helping in growing the infrastructure, integration into the CERN Puppet infrastructure, as well as working on the continuous integration process that manages the cloud images. In the everyday work, Windows and SLC are the main operating systems I work with. I usually contribute to opensource projects using mainly Python, Ruby and Puppet.

FISCHER Max**Karlsruhe Institute of Technology - Germany**

I graduated in 2013 in physics at the Karlsruhe Institute of Technology as a member of the CMS collaboration. Centered on High Energy Physics workflows, my work combined both infrastructure development and analysis tasks. Currently, I am working on my physics PhD, with a strong focus on computing infrastructure for analysis usage. The main goal is the design of a generic extension of HEP storage hierarchies onto batch system worker nodes. Using coordinated caches to achieve data locality, high data processing rates are made available on dedicated and remote resources, regardless of storage attachment.

FRIESE Raphael Marius

Karlsruhe Institute of Technology - Germany



I am working on the development of an integrated analysis framework that is intended to be used among several German CMS groups. This framework will be used by our group in the Higgs->TauTau Analysis. In my diploma thesis I worked in multivariate methods as the final discriminator, which nowadays becomes a standard approach. As it is the standard in CMS and also done in CMSSW, we use C++ for time-critical and CPU intensive tasks while we prefer to use Python (still in Version 2) anywhere else. Since July 2013 I am systems administrator of the Institute of Experimental Nuclear Physics at the KIT. Since May 2014, I am CMS Data Manager for the German Tier-1 GridKa.

GARCIA ARZA Griselda

CERN, Geneva - Switzerland



I studied BSc, MSc and Pre-Doctoral MSc in Computer Science at the University of Oviedo in Spain. Currently, I work at CERN as software engineer and I am involved in two main projects: - EDMS6 (Engineering & Equipment Data Management Service), which stores the technical documentation of CERN and the LHC. -JMT (Job Management Toolkit) which is a web application used to manage the invoicing of jobs outsourced to a number of contractors working on the CERN site. I do programming mostly in Java, GWT, Spring and PL/SQL and I actively participate in the design of new features for both applications.

GARCIA FERRERO Juan

HEPHY, Vienna - Austria



24 year-old Spanish Industrial Engineer and Physicist. Master thesis dealt with top-antitop cross section in CMS, in IFCA, Santander, 2013. Currently, I am pursuing my PhD in HEPHY, Vienna, involved in the assembly, testing and commissioning of the silicon vertex detector for Belle II.

GLASER Fabian

University of Göttingen - Germany



I received my master degree in Applied Computer Science in 2013 from the University of Göttingen in Germany. In my master project, I investigated how data analysis tasks from the LHCb experiment can be solved with MapReduce on a Cloud Computing infrastructure. Currently, I am conducting my PhD studies at the University of Göttingen in scope of a project, where we investigate how scientific applications can be ported to Cloud platforms in a broader scope. Data analysis from the ATLAS experiment is one of our main case studies. I enjoy working in multidisciplinary and international environments and spent two terms of my master studies at the University of Iceland. Regarding technical knowledge, I am most familiar with Linux-based operating systems, especially with Debian-based distributions and have programming skills in C/C++, Java and bash scripting. Recently, I also started with programming in Python.

HAITZ Dominik

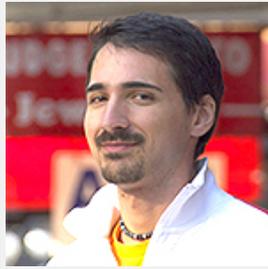
Karlsruhe Institute of Technology - Germany



I am a PhD student at Karlsruhe Institute of Technology. The main focus of my work is physics, where I am working on the double-differential cross-section measurement of Z boson production in the electron decay channel. For the past two years I have also been responsible for determining the data-driven jet energy corrections in the Z->mumu channel. I have made major contributions to the common software frameworks (in python and C++) used in HEP data analyses at KIT. Additionally, I have a strong interest in computing. I have contributed to the development of WLCG job submission software and I am administrator of the local GlideIn-WMS installation at KIT. My technical expertise comprises Linux (SLC, Ubuntu), bash, C++, python and ROOT.

HARTMANN Helvi**Frankfurt Institute for Advanced Studies - Germany**

I am a PhD student at the Frankfurt Institute of Advanced Studies of the Goethe University Frankfurt in the Group of Prof. Lindenstruth. The title of my PhD thesis is „CBM FLES Timeslice Building based on MPI“. The data of the Compressed Baryonic Matter (CBM) experiment currently being built at FAIR---GSI is collected by the First---level Event Selector (FLES) and stored in Timeslices. To do so, the FLES Timeslice building has to combine data from all input links to time intervals and distribute them via a high---performance network to the compute nodes. My task is to carry out the data distribution in high level software using MPI (Message Passing Interface). For this purpose I have to be trained using C++, bash scripting and Python for data analyzing.

HASEITL Rainer**GSI Helmholtzzentrum für Schwerionenforschung GmbH, Helmholtz - Germany**

I am a computer scientist and working at the GSI in Darmstadt/Germany since 2007. I develop software in the beam instrumentation group to control accelerator devices like high voltage power supplies or programmable logic controllers (PLCs). Moreover I am involved in image processing systems e.g. for the camera readout of scintillator screens or Beam Induced Fluorescence (BIF) monitors. I am mainly programming in C++ and Java and used the Qt framework in several projects. On the GSI campus, the construction of several new accelerators has begun - the FAIR project (Facility for Antiproton and Ion Research). My colleagues and me are testing several frameworks (e.g. FESA and IEPLC by CERN), applications and programming paradigms if they fit into the future FAIR control system.

JOVICEVIC Jelena**CERN, Geneva - Switzerland**

During the past three years of my PhD studies within the KTH ATLAS group, I have been involved in the Higgs to WW analysis (HWW) and contributing to the b-jet identification algorithms and the Liquid Argon (LAr) ECAL team. I have experience in various aspects of the HWW analysis: from the sample production on the Grid to the study of the analysis performance and statistical interpretation of results. A part of my expertise also lies in development of the background estimation methods. In particular I was studying the top quark background in analysis with 1 jet and Z/Drell-Yan processes. I was developing a tool to reduce the top background in the WW control region using the MVA technique. In the ATLAS flavour tagging group, I work on calibration of the b-jet identification algorithms using the likelihood based approach. Within the LAr ECAL team, I performed an optimisation of the thresholds used to check the stability of the electronics calibration constants in the LAr calorimeter.

KALOGEROPOULOS Anastasios**CERN, Geneva - Switzerland**

I am a master student in Computer Science at the Department of Informatics and Telecommunications at the University of Athens. Before that, in 2013 I obtained my B.Sc degree at the same university. The main objective of my bachelor thesis was to develop a cloud programming pattern for iterative computations in F#. During my studies I have used many programming languages, mainly C/C++,Java but I am also familiar with Python,HTML,PHP,SQL. Currently I am doing a one year internship as a technical student in the Beams (BE) department, Beam Instrumentation (BI) group at CERN. My task is to develop graphical user interfaces in Java in combination with real-time acquisition software in C+++ for the beam loss measurement system in CERN's injectors.

KOUZINOPOULOS Charalampos**CERN, Geneva - Switzerland**

I am a computer scientist, obtaining my PhD degree on 2013 with the title 'Sequential and Parallel Implementations of Multiple and Two-Dimensional Pattern Matching Algorithms'. I am currently working as part of the CERN ALICE team, as a Senior Research Fellow. My research interests centre mostly around High performance computing, Parallel and distributed processing across various parallel platforms including clusters and multicore processors as well as GPGPU computing. As part of the ALICE team, I have worked on two different projects. The first project involves the development of a prototype for the next version of AliRoot while for the second project, I am part of the team that develops and tests different prototypes to handle the data transportation between FLPs and EPNs."

KOWALEWSKA Anna Bozena

H. Niewodniczański Institute of Nuclear Physics, Krakow - Poland



About ten years ago I was inspired by lives of three people: Maria Sklodowska-Curie, Michael Faraday and Richard P. Feynman. This inspiration helped me in coming back to my dreams and after graduating in Law I was able to completely change the field and obtain M.Sc. Degree in Physics with very good results.

My research interests are centred on experimental particle physics. I have worked previously on the kaon and meson phi physics (experiments CBM and KLOE) and currently I am working for the ATLAS collaboration. I focus on searches of the charged Higgs boson, in the tau and neutrino final state with a hadronically decayed tau lepton. The experimental observation of charged Higgs bosons, which are predicted by many models with an extended Higgs sector, would indicate physics beyond the Standard Model.

KUEHN Eileen

Karlsruhe Institute of Technology - Germany



I graduated as an engineer of computer science in 2009 from the University of Applied Sciences (HTW) Berlin. I was part of a research project at HTW where I worked on position and context-aware services using active and passive RFID technologies. From 2011 to 2013 I worked as a project manager to build a wireless transfer and development centre in Berlin.

Since then I am a PhD researcher in computer science at Karlsruhe Institute of Technology. My work covers the development and improvement of a monitoring tool for tracking data flows of individual high energy physics grid jobs of the WLCG at the GridKa Tier-1 centre. An important part is the analysis of collected data for discovering, understanding and finally categorizing communication and job patterns. This work is the basis for future developments of an automated approach for anomaly detection of grid jobs.

LÉCZ Zsolt

ELI-ALPS, Szeged - Hungary



I am 28 years old, not married and no children. I graduated in 2010 at the University of Cluj Napoca (KoloZsvAr), Romania. My profile was Physics and Informatics, therefore beside theoretical physics I got a pretty strong education in several programming languages. Unfortunately I could apply this knowledge only during my master study (in 2009), when I was working on a particle tracking code written in C++. I have minor experience in Java, Assembly, Fortran and HTML as well. I received the PhD degree in laser and plasma physics at TU Darmstadt, Germany, in October, 2013. In February, 2014 I joined the theoretical plasma physics group of ELI-ALPS as junior scientist. As I am doing mostly numerical modelling and laser-plasma simulations, I am in strong interaction with the IT department and I need to know as much as possible about the computational environment. I think this summer school will be very useful for understanding the different parallel computing possibilities at our institute.

LINARES GARCIA Luis Emiro

Universidad de los Andes, Bogota - Colombia



Physicist and Electronics Engineer by training, I am currently working on computing operations for The CMS Collaboration, on aspects of distribution of jobs and detector conditions data all over the Grid. Before coming to CERN, I was designing hardware (and complementary software) for a company specialized in geological studies on demand. When out of office, my interests on computing lean towards massively parallel architectures for High Performance Computing (i.e. GPUs and FPGAs), interactive data visualization (both web- and desktop-based), and scalability-oriented algorithms. On the hardware side, I have interests in sensor fusion for robotics, power converters and electromagnetics simulation. When not working, I like to spend time with family and friends visiting the countryside, swimming and a little of martial arts.

LIONETTO Federica

University of Zurich - Switzerland



I hold a MSc degree in physics from University of Pisa (Italy). I specialized in high-energy physics, graduating with top marks in July. While at university, I had the opportunity to spend several months abroad, working as a summer student first for the CDF experiment at FNAL, in the US, where I participated in the data analysis activities on rare B_s^0 meson decays, and then for the NA62 experiment at CERN, where I was involved in a project aiming at demonstrating that parallel computing can be used at trigger level in high-energy physics experiments. I further developed my interests in both heavy-flavor physics and trigger systems while working as a technical student for the LHCb experiment at LHC, where I investigated how to improve the online selection of hadronic heavy-flavor decays. I also devoted a part of my free time to outreach, working for INFN, CERN, and the municipality of Pisa. I am now a PhD student of the University of Zurich (Switzerland) and I am working for the LHCb experiment, focusing on R&D activities on silicon microstrip sensors in view of the upgrade of the tracking system. I am characterizing the performances, in terms of charge sharing and charge collection efficiency, of sensors with different geometries. Inefficiency in the charge collection has been observed in a previous measurement on current sensors and may be non-negligible for the new ones, so a detailed study is necessary before the design of the sensors is finalised. As a part of my PhD studies, I will also work on data analysis and on the detector control system, whose supervision level is based on the WinCC-OA SCADA system.

MARI ROMERO Antonio**Polytechnic University of Valencia - Spain**

Currently, I am leading and participating in architecture definition of each computing part of the NEXT experiment: storage, processing, analysis, monitoring and distribution system. I am in charge of the configuration, administration and maintenance a farm of computers for the data acquisition system with Scientific Linux. I am working in the setup and evaluation the performance of several distributed file systems like Guster FS, Lustre FS and Ceph FS. Developing and testing scripts to use multicore technology and administration the analysis batch system with Torque/Maui.

MARTINA Stefano**CERN, Geneva - Switzerland**

I am actually a technical student at CERN in Physics department, I have a Bachelor of computer science at Florence University and I am studying for getting a Master degree. Before coming at CERN I had already work experience in the field of web programming, ERP, NLP and ontologies. I work on software written in C++ called TkLayout that is placed in an early developing stage of the new trackers of CMS experiment. It build the geometry of the tracker starting from certain parameters using symmetry in phy, also make performance analysis using statistical inference instead of simulations, like for instance calculating error propagation through modules. The idea is of developing an instrument that physicists can use for getting rapid information for testing new ideas; anyway TkLayout is capable of giving as output the geometry in a format that is feedable to the CMSSW framework for detailed Monte Carlo simulations.

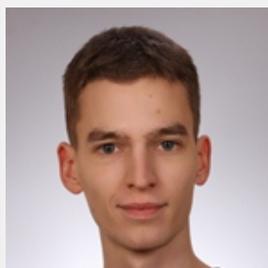
MILIOU Ioanna**National Technical University of Athens - Greece**

I recently graduated from the National Technical University of Athens as an Electrical and Computer Engineer. My diploma thesis title was "Tag recommendation for images of Flickr based on their spatial location", and deals with extracting information from the Flickr image database and applies novel recommendation techniques for recommending tags that involve the spatial and textual information of the images. Based on my diploma thesis we will publish a paper on DEXA Conference 2014 with the title "Location-aware Tag Recommendations for Flickr". I am currently working as a Software Developer in a Greek industry of Information Technology and Services. My interests include areas like information retrieval, data mining and big databases in which I am currently searching for a PhD.

MOHAMED Hristo**CERN, Geneva - Switzerland**

I am currently a technical student in LHCb, working in the online team. I am highly interested in the in the DevOps world, for it combines the good sides of both the operations and development area. I am heavily interested in automatization and scripting and believe that Puppet is superior to normal scriping in controlling the process of automatization. I mainly script in bash/python/ruby, bug am also familiar with java and C++.

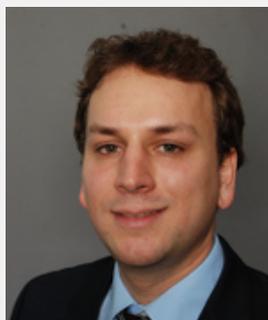
Another area I am highly interested in is security, as I believe it is highly neglected by the majority of people, but still a very important area in computing.

NIEDZIELA Jeremi**CERN, Geneva - Switzerland**

I am a physicist from Faculty of Physics, Warsaw University of Technology. My main field of interest is analysis of residual baryon correlations. Previously, I've been also working on angular correlations of non-identified particles in proton-proton collisions. I am a member of ALICE collaboration and I conduct my study based on data from this experiment, as well as on data from theoretical models. Currently I am a doctoral student in CERN and I work on Event Display of ALICE to prepare it for next periods of data taking. Main goals of refactoring of this system are to fully separate reconstruction of events and displaying of visualization, which involves sockets to send events between different parts of the system. Moreover, new feature of bookmarking interesting events was requested and I am also responsible for implementing it.

NIEKE Christian**CERN, Geneva - Switzerland**

I am currently working as a doctoral student at CERN Data Storage Services (IT-DSS) in cooperation with Technische Universität Braunschweig, and my thesis topic is: "Quantitative optimization of CERN's large storage systems based on measured user access patterns". In 2007 I graduated as Diplom-Ingenieur (BA) / B.Sc Information Technology from the University of Cooperative Education Mannheim, in cooperation with the German Aerospace Center [DLR]. I continued my studies at Technische Universität Braunschweig where I received my M.Sc. in Computer Science in 2010. I then worked until 2013 as a research assistant at Technische Universität Braunschweig, Department of Bioinformatics & Biochemistry on MetaboliteDetector, a tool for the analysis of GC/MS based metabolomics data, and a management system for experimental data. Afterwards, I worked for 7 months as a research assistant at the National Institute of Informatics (NII) in Tokyo, Japan, before coming to CERN.

NIKODEM Thomas**Physikalisches Institut Heidelberg - Germany**

I am currently a PhD student in particle physics with the LHCb collaboration. For my work so far, I have contributed to a precision measurement of b hadron lifetimes which tests the Heavy Quark Expansion model of the b quark. At the moment, I am working on an angular measurement of the decay, $B \rightarrow K^* \mu \mu$, to search for deviations from the standard model in b-s quark transitions. I am also involved in performance studies and improvements of the track reconstruction algorithms which will be used in the upgrade of the LHCb detector. The increasing data yield after the upgrade puts strict requirements on the algorithms, both in efficiency and also in timing, which are accomplished using the latest computing technology.

OTTO Adam Jedrzej**CERN, Geneva - Switzerland**

I am a graduate of data communication at Military University of Technology in Warsaw in Poland. Recently I have obtained French Government Scholarship, which has given me the opportunity to undertake "Conception and Management of Complex Computer Systems" master studies, at the two most prestigious French universities – Ecole Centrale Paris and Ecole Polytechnique. After very successful year at Ecole Centrale Paris, I have received VIA scholarship and started to work as R&D Engineer/Junior Fellow at CERN. At the moment I am working, at LHCb online team, on TCP/IP based event generator which will be used to simulate and test system behaviour, performance. I am also responsible for some maintenance and administration tasks at LHCb server farm. I am familiar with: C, Python, Shell scripting, Linux, Windows systems.

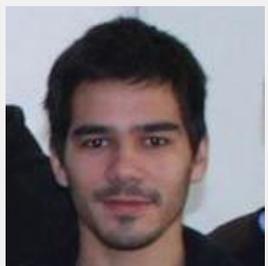
PÉK János Dániel**CERN, Geneva - Switzerland**

I work at IT-PES-PS, I am a "Batch boy", which means I am member of the Batch team. My current project is to discover the market of high-throughput batch systems, investigate the feature-set of the alternatives and perform different benchmarks against them. I have been developing a stress testing framework in Python and BASH. Based on the test results of the candidate software products, we'll upgrade CERN's batch farm to the chosen system accompanied with its integration with many other software in use at CERN's infrastructure.

I also cooperated in a project aiming to provide a query cache system to protect the currently used IBM LSF batch system from heavy query-loads.

I am fluent in Python, C and BASH, and I work on Linux and MacOSX. I am acquainted with most of the web- and mobile-based development techniques. I am especially interested in non-relational database management systems (MongoDB) and functional programming (Haskell).

I play the piano for ages, and I love jazz, classical music and music theory.

PEREIRA Andre**LIP-Minho, Braga - Portugal**

I am a PhD Computer Science student in High Performance Computing. I am currently working on improving the efficiency of event data analysis applications on homogeneous and heterogeneous computational systems. I am addressing inefficiency issues in both code and application runtime, and exploring parallelism on CPU and accelerator devices (such as GPUs).

Recently my focus is on automatic parallelisation of event data analysis applications on heterogeneous platforms.

PISANI Flavio

CERN, Geneva - Switzerland



I am a master student in physics, with a special focus on electronics and computer science, at University of Rome "La Sapienza". Now I am working at CERN as a Technical Student in the LHCb experiment.

My current project is related to the DAQ upgrade scheduled to happen in LS2. I am working on the DAQ network and I am implementing a new transport layer for Event Building emulation software, in order to evaluate new technologies. This transport layer is implemented using zero-copy technology, in order to achieve lower latencies and minimize the CPU and memory bandwidth overhead introduced by the transfer itself.

I am experienced in testing high performance network cards, developing C/C++ applications, especially networking and DAQ applications, VHDL and FPGA developing.

RABADY Dinyar



I first started working at CERN as a summer student on the Level-1 trigger of the CMS experiment where I helped in the development of the Trigger's online software. I then continued working on the Trigger for my master's thesis where I developed a method to access the registers on an AMC processing module via TCP/IP. Now I am in the middle of my PhD studies, working on the upgrade of the Global Muon Trigger. For this project I am mainly developing firmware in VHDL, but I have been programming a lot in C++, Java, and Python before starting my thesis. I work using Linux, but am familiar both with Windows and Mac OSX.

RODRIGUEZ PEON Alberto

CERN, Geneva - Switzerland



I am the Service Manager of two Grid Services, VOMS and LFC. This implies being the main responsible of both, making sure they present high availability, attractiveness for the end users and up-to-date documentation. As part of my job at CERN, I also contribute the support rota for all services ran by the IT-PES-PS section. For all this, we use a DevOps approach within the Agile Infrastructure at CERN (based in virtualisation with Openstack and Puppet). Previously, I completed both my BSc and MSc in Computer Science at the University of Oviedo and was an openlab Summer Student in 2013. I have a wide knowledge of Linux and experience with Python and Java for solving real-world problems. My professional interests are software engineering, cloud computing and machine learning.

ROMERO MARIN Antonio

CERN, Geneva - Switzerland



Currently, I am leading and participating in architecture definition of each computing part of the NEXT experiment: storage, processing, analysis, monitoring and distribution system. I am in charge of the configuration, administration and maintenance a farm of computers for the data acquisition system with Scientific Linux. I am working in the setup and evaluation the performance of several distributed file systems like Guslter FS, Lustre FS and Ceph FS. Developing and testing scripts to use multicore technology and administration the analysis batch system with Torque/Maui.

SAUNDERS Dan

Bristol University - United Kingdom



I am currently working towards my Particle Physics PhD, focusing on 4-body amplitude analyses at LHCb. These are particularly interesting, as many can lead to constraints on CP violating phases. As such analyses have a large number of free parameters, they introduce many computational challenges. Further, given that 4-body decay data is 5-dimensional, I have also previously explored multivariate data visualisation techniques as part of my Master's degree. In addition to these analyses, I also develop software for analysing test beam data for the LHCb Vertex Locator (VELO) upgrade pixel detectors, focusing on event reconstruction and efficiency measurements."

SMITH Joshua Wyatt**University of Cape Town - South Africa**

Joshua Wyatt Smith, originally from South Africa, is currently pursuing his Master's degree in physics at the University of Cape Town. He is a member of the ATLAS collaboration where his current work revolves around high performance and high throughput parallel computing on the power efficient ARM architecture. This involves porting the ATLAS software to the required architecture as well as researching current Cortex-A series processors. For his honours thesis he looked at muon pairs created through photon processes in high energy collisions. He compared the Monte Carlo generators HERWIG, PYTHIA and LPAIR when modeling the sub-process gamma-gamma to two muons. He obtained his undergraduate degree in physics while playing division 1 tennis at the University of Montana, USA.

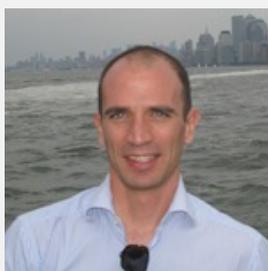
SOKOLOV Michael**Nizhny Novgorod State Technical University - Russian Federation**

I graduated from Nizhny Novgorod State Technical University n.a. R.E. Alekseev, Russia. Now my work is oriented around a creation and maintenance of small data centers. Business focus: system integration, the creation of virtual cloud -based Microsoft Hyper-V and AMD x86-64. Division of Industrial problems to parts as possible that can be performed in parallel. Creating a specific system of document management, monitoring and control. TCP-IP network. Programming languages: 1C: 8x, Object Pascal, PowerShell. OS: Windows, Linux. Lead a team of 3 employees. Research interests: A semi-empirical quantum mechanics - modeling chemical reactions. In fact, the search for "stable" intermediates phosphine interaction with oxygen. Methods: MNDO, MNDO/d, AM1.

SOSNOWSKI Adam**CERN, Geneva - Switzerland**

At CERN I am a part of Communication Engineering team (IT-CS-CE). I have graduated from the Warsaw University of Technology. The wireless networks, especially Wi-Fi are my main areas of interest at work. I implement the development of Eduroam (world-wide roaming access service) at CERN. In addition my responsibilities involve helping with configuration of the network and troubleshooting in case some Wi-Fi problems are revealed around the CERN area. I also assist with planning new wireless infrastructure inside buildings.

I am familiar with the most commonly used OS, like Windows and Linux (especially Ubuntu and SLC). During my work I use also MAC, so I don't have problems with navigation in this system. In term of programming languages I have good knowledge of Perl and JAVA.

STANCU Stefan Nicolae**CERN, Geneva - Switzerland**

Stefan Stancu graduated the Electronics and Telecommunications Faculty at University Politehnica of Bucharest in 2001. Soon after he joined CERN as a project associate and was involved in the R&D program for designing high performance Ethernet networks for the ATLAS experiment. In 2005, upon completion of his PhD thesis at the same university, Stefan moved to University of California at Irvine and continued working for the ATLAS experiment. He played a leading role in the design, deployment and operation of the dedicated data acquisition network, a key piece of system that transported and filtered the physics data that led to the discovery of the Higgs boson. Stefan joined CERN's IT department as an openlab COFUND fellow in 2012, where he works on a Software Defined Networking project in collaboration with HP networking. Currently Stefan is a member of the engineering team of the group responsible for CERN's IP networks.

SZOSTEK Pawel**CERN, Geneva - Switzerland**

I am a computer scientist working as a Fellow in the Platform Competence Center at CERN openlab, which is a CERN-Intel partnership. In my work I am focused on benchmarking, efficient computing and performance monitoring. My duties encompass advanced computing studies on various clusters of servers using different compilers, as well as managing a cluster of development machines and providing them to our colleagues at CERN and beyond. I graduated in Computer Science from Warsaw University of Technology. Previously I was employed at the University of Warsaw where I focused on machine learning techniques applied to immense sets of scholarly articles gathered in a digital library.

TEPEL Philipp**Bergische Universität Wuppertal – Germany**

I am currently working on my PhD thesis in experimental particle physics in my second year. The main topic is the measurement of the fiducial single top-quark production cross-section at the LHC with the ATLAS detector at 8 TeV center-of-mass energy. My responsibilities include the maintenance and development of the institute's analysis framework, which is written in C++ and Python. I am using Linux as well as Windows in most parts of my analysis.

TIMKO Helga**CERN, Geneva – Switzerland**

After having been a CERN PhD student of the University of Helsinki working on plasma modelling of CLIC vacuum arcs and developing a 2D particle-in-cell code, I have studied longitudinal beam dynamics issues in the LHC injectors as a postdoctoral fellow with several beam dynamics codes. Presently, I work as staff physicist on simulations of the longitudinal beam emittance blow-up in the LHC. Contributing to the development of the new CERN code 'PyHEADTAIL', which allows for full 6D beam dynamics particle tracking, and analysing measurement data are part of my work. Amongst others, I am familiar with C++, python, bash, html, php, latex, and git source code management.

TOMOYORI Katsuaki**Japan Atomic Energy Agency, Naka-Gun - Japan**

I have a PhD in biophysics, although my diploma thesis in MSc deals with nuclear experimental physics. That means I feel more at home in physics. For my PhD I switched to biophysics and protein chemistry. I am interested in the structural information of hydrogen atoms and hydration waters obtained by neutron protein crystallography. Currently, I am working at Quantum Beam Science Center, JAEA and participate in neutron structural biology group. I am engaged in designing a dedicated best-in-class high throughput and high resolution time-of-flight single crystal biomacromolecular neutron diffractometer at the J-PARC high power target station. In personal aspect, I really love travelling and learning new things, and discussing about any topic.

UL AIN Qurat**COMSATS Institute of Information Technology, Islamabad – Pakistan**

Recently I have completed my Bachelors in Physics from COMSATS Institute of Information Technology. During my university studies I gained a wide spectrum of knowledge which varies from high energy physics and mathematics to computer programming and electrical circuits. From last year I have worked on research project "Performance of charm baryon in ITS under angular correlation". The main focus was to simulate the Silicon Pixel Detector (SPD) to detect the short decay length particle i.e. Λ_c with the good specification of detector. Used Geant4 in simulation work. Programming languages I am familiar with are C++, ROOT and Java. Finally CSC is ideal place to meet people of same interests, improve my technical skills and enjoy a beautiful island.

VISLAVICIUS Vytautas**Lund University - Sweden**

I am currently a PhD student in the ALICE group in Lund University, Sweden. My master project focused on the energy loss of partons traversing the Quark Gluon Plasma, a hot dense medium created in Heavy Ion collisions. Now I am taking my analysis to a new level and looking into energy losses of jets. I am using PYTHIA + Fastjet to simulate the events with jets and compare them to what one observes with the ALICE detector. I have years of experience with C, C++ and working with ROOT/AliRoot frameworks. I am also involved with the ongoing ALICE upgrade, namely, developing the software for testing the new backplanes, as well as a new simulation of electron distortion due to ion flow in TPC.

VÖRÖS Viktor**ELI-HU Nonprofit Ltd., Szeged - Hungary**

I am 34 years old, married and have 2 children. I graduated in 2003 at the University of Szeged, Hungary. I got a Software Engineer (Msc) diploma. During the years I worked at various companies and worked on various projects like web application development, image processing and optimization, enterprise application development. I am (mostly) a Java developer with a wealth of experience building up complex systems but I have skills in C++, PHP, Ruby, HTML and JavaScript as well.

At the beginning of 2014 I joined ELI-ALPS where I help creating an environment for scientists which helps them with doing their work. My job involves application development and improvement as well as software integration, virtualization and multicore programming.

VOVCHENKO Volodymyr**Frankfurt University - Germany**

I am currently in my first year as a PhD student at the Frankfurt University, working mainly on the CBM experiment at FAIR. Previously, I finished MSc in Theoretical Physics where I worked on the description of relativistic heavy-ion collisions. Presently, I work on the on-line physics analysis and selection in the CBM experiment. My main task is the implementation of the procedures to extract various physical parameters from observables, which can give an insight into processes taking place in nucleus-nucleus collisions. An example of such parameter is temperature at the freeze-out. Due to very high data rate planned at CBM these procedures need to be very fast, vectorized and parallelized between cores of CPU and GPU. My working environment is CBMROOT framework running on Linux and the code is written in the C++ language. I am also familiar with Fortran and Java.

WAQAR Muhammad**COMSATS Institute of Information Technology, Islamabad – Pakistan**

I graduated in Computer Engineering from COMSATS Institute of IT (CIIT) Islamabad, Pakistan in 2011. Currently I am a Researcher at CIIT and in parallel working on MS thesis that is "optimization of Mobility Anchor Point (MAP) in Hierarchical Mobile IP". I worked a few months with ALICE - Inner Tracking System (ITS) group of CIIT, currently working on HPC simulators and schedulers. My responsibilities include the management and monitoring of PK-CIIT which is the Alice Tier-2 site. I am familiar with the Linux and comfortable with programming languages such as C/C++, Shell scripting, PHP, HTML, MYSQL, JAVA script, Assembly and VHDL.

WEJNEROWSKI Damian**Bergen University College - Norway**

I am a master student in software engineering at Bergen University College. I am also a member of the group working on upgrading the readout system for the ALICE TPC. During my master thesis I am developing a computer simulation for the CRU based readout chain to be installed during the LHC Long Shutdown 2. Many parts of the designed hardware are still under consideration and the simulation of hardware model will help to solve the problems occurred while designing the hardware for upgrade of TPC. Since 2012 I am a software developer in Norwegian public health service. I am focused on developing integration systems on .NET platform which are significant in introducing of a new standard for network security.

WITOWSKI Sebastian Jerzy**CERN, Geneva - Switzerland**

I first arrived at CERN in 2012 as a technical student in GS-SIS group where I have been working as a developer on the open access software suite Invenio and the High Energy Physics information system – INSPIRE (powered by Invenio). In September 2013 I became a Staff member of the IT-CIS-DLS team where I am involved in development and maintenance of the CERN Document Server, (again powered by Invenio). I am implementing new, multimedia related features, providing support to the CDS users and participating in various CERN projects related to digitization of the archives. In my everyday work I mainly use Python with a bit of JavaScript. I have a hands-on experience with C++, C#, Java, PHP programming languages and I am also interested in web technologies (HTML, CSS, JavaScript + frameworks). I mainly use Ubuntu but I am also familiar with Windows and other Linux operating systems.

YILDIRIM Eda**Deutsches Elektronen-Synchrotron, Hamburg - Germany**

I got my BSc and MSc degree in physics from Middle East Technical University in Turkey. Now, I am a PhD student at DESY working on Lorentz angle measurement on highly irradiated silicon micro strip detectors for future ATLAS tracker. My work consists of developing software to analyse the data I took with the test beam setup I prepared for Lorentz angle measurement. Right now, data taking is done and I am working on software needed to do the analysis in EUTelescope data analysis framework. The software I am developing is aimed to be used by other users and designed to reconstruct signal we get from strip sensors, align it with rest of pixel sensors in the system, find the track of passing particle and use these tracks to do final analysis. I am mainly using C++ and ROOT in linux operating system. I am also familiar with basics of shell and python.