

# CSC2009 PARTICIPANTS

**Carlos AGUADO SANCHEZ**

**CERN, Geneva - Switzerland**



Carlos Aguado Sanchez works for the CERNVM Project within the Applied Fellow Programme at CERN. Such project aims to develop and deploy a new portable analysis facility for the HEP community based on alternative solutions for software distribution (i.e. p4p file system over HTTP) and computing power usage (i.e. hardware virtualization). Specifically, his role within such project is to contribute to design and maintain the service infrastructure focused on two main aspects: horizontal scalability, efficient distribution model and perceived QoS. He is Telecommunications Engineer from Universidad Politecnica de Madrid.

**Arshad AHMAD**

**Aligarh Muslim University - India**



I am currently working on the dimuon part of the high level trigger of ALICE. I have also done performance studies of the second station of the Forward dimuon spectrometer of ALICE. Currently I am also engaged in some physics studies @ ALICE, LHC. I have one year experience of working with AliRoot.

**Khawar AHMAD**

**University of the West of England (UWE), Bristol – United Kingdom**



After the completion of graduate studies, I have been selected as Research Associate at NUST Institute of Information. Based on good academic record and good work experience, I have been invited by CERN Geneva, Switzerland to work on CMS Experiment for the duration of one year in 2007. My ability to learn new things and my past experience helped me a lot in understanding my work in CERN. I worked on iCMS; a modern web information system that handles the notes, news, agendas and data analysis produced in a collaboration of about 6000 physicists, engineers and technicians at CERN. I worked on notes approval workflow and developed CMS people/institute search tools. I am happy I was able to complete my job to their satisfaction level. During my stay at CERN, I met with Prof. Richard McClatchey of University of the West of England. My CERN experience helped me to get MPhil opportunity in the distributed computing group at UWE. I started my MPhil in October 2008 and now I am doing my thesis on optimizing workflow execution performance. As a case study, I am using AlcaRecoWorkflow used at Tier0 for reconstructing data coming from the detector at CMS experiment.

**Anton ALKIN**

**Bogolubov Institute for Theoretical Physics, Kiev - Ukraine**

**Juan de Dios ALVAREZ**

**Universidad Michoacana de San Nicolas de Hildago, Morelia - Mexico**



I have obtained an MSc in the area of Computer Science, I started from March 2009 the PhD. in physical sciences in computational physics. The operating system with which I am familiar with linux (scientific linux, debian) and Mac OS. The programming languages C, C ++, java, python. I am currently working on two experiments, the Observatory of the Pierre Auger collaboration and the HAWC High Altitude Water Cherenkov Experiment.

**Jamila BASHIR  
BUTT**

**National Centre for Physics, Islamabad - Pakistan**



I completed my PhD in 2006 from Syracuse University, NY USA. During my PhD I had to use C++ extensively as all our data analysis programs were based on C++. I also had to do some exercises in Fortran. There were few other non technical languages which I used e.g. LabView, LaTeX.

For two years I worked as a post-doc at National Centre for Physics Pakistan. Now I am working as a research scientist at the same institute. My responsibility includes physics analysis in charm quark and top quark group of CMS experiment. CMS software has been developing and changing at a fast pace. The CERN School of Computing will be helpful for me to understand the changing environment of CMS/LHC software. My experience at CSC will be useful for me to guide the student at NCP as well.

**Barbara BECCATI**

**CERN, Geneva - Switzerland**



I am an Electronic and Telecommunications engineer (University of Ferrara, Italy). I have been started my experience at CERN as Technical Student in 2007. Since 2008, I am working as fellow on the CMS Data Acquisition (DAQ) and Detector Control System (DCS). I am involved in the development and management of the CMS online database using the Oracle Portal Technology. I have good knowledge of Java and Struts and I am quite familiar with C, C++, Swing, JSF and SQL.

**Walter BENDER**

**RWTH Aachen University - Germany**



I am currently involved in the search for supersymmetry at CMS in the context of my PhD thesis. I am active in developing and using extended search strategies and multivariate analysis techniques. In addition to that I am familiar with the administration of our local grid facility as part of the LCG Grid and I work as a data manager for transferring datasets between the Grid sites. This involves the use of databases like MySQL and Oracle for the purpose of accounting and documentation. I'm used to Linux, Mac OS X and Windows. My favorite programming languages are Python, Java and C/C++. I have a /basic knowledge/ of Perl, PHP, JavaScript, Bash and Haskell.

**Matthias  
BERGHOLZ**

**DESY, Zeuthen - Germany**



Recently I wrote a Labview based software for the measurement of C/V and I/V dependencies of solid state particle detectors (silicon, GaAs, diamonds etc). Currently I've been starting programming a data base for the Central European Consortium (part of the silicon upgrade for the CMS tracker). This data base should have a web based user interface. Furthermore I work on simulations of the electrical field and the detector behaviour of the mentioned sensors for the CMS tracker upgrade. For data analysis of our current measurements we use the ROOT software package. Mostly I work with Windows and Linux as operating systems but I also have also some basic knowledge of MacOS X. I am used to C/C++ or Labview and years ago I have worked with Turbo Pascal.

**Nicola BESSONE**

**CERN, Geneva - Switzerland**



I am a computer engineer graduate at the Universita degli Studi di Torino - Italy in Methodology and Informatics Systems in March 2007, after have done my Master thesis as a Technical Student in the Telecommunication section of CERN. In June 2007 I join the Young Graduate Trainee program in the Simulation and Modeling group at the ESA - European Space Research and Technology Center in the Netherlands for one year. In summer 2008 I been two months in Barcelona for the Space Studies Program of the International Space University of Strasbourg. Since September 2008 I am working at CERN in the IT - Data Management group on the development and maintenance of the CERN Advanced STORage manager (CASTOR). I am responsible for defining and implementing of a serialization library for the new CASTOR tape format, and the integration of it in the CASTOR storage management system.

**Stefan BIRKHOLZ**

**Georg-August University Göttingen - Germany**



I am developing and deploying a local and grid-level monitoring system that was developed cooperatively at the Universities of Goettingen and Karlsruhe. I am an experienced Linux User (using Ubuntu privately and Scientific Linux in the Institute) with some Windows skills. I am familiar with programming in C++, C, Java and Python.

**Maksym BORODIN**

**DESY, Hamburg - Germany**



Currently I am working in offline group of ZEUS experiment, doing development of ntuple production system (both ROOT and PAW) and data analysis software (ROOT-based), LSF cluster administration and also some physics analysis. My main task at this time is to write additional backend for production system to enable production on GRID using gLite middleware. I have experience working with Windows and Linux and such programming languages: C/C++, python, java, perl, php, VB, C# and x86 assembler (little bit).

**Carsten BRACHEM**

**Georg-August University Göttingen - Germany**



I am a Bachelor student at the University of Göttingen. I am currently working on statistical methods for data analysis for my Bachelor's thesis.

**Sebastian BUKOWIEC**

**CERN, Geneva - Switzerland**



In March 2009 I obtained my master degree in Computer Science participating to the CERN Technical Studentship programme, working in the IT/IS group at CERN on virtual server provisioning. From May 2009 I am Marie Curie Fellow in PH/CMD group at CERN working in DAQ field. Currently I'm involved in developing and maintaining the ElogBook system for the CMS experiment. ElogBook is a web based application for reporting the various events occurring in the CMS by the operators. I have programming experience on Windows and Linux environments, mainly in Java, PHP and C#.

**Juan Manuel CAICEDO CARVAJAL**

**CERN, Geneva - Switzerland**



I am a computer engineer currently working for the Online group of the LHCb experiment at CERN. I have been involved in the system administration of the cluster, especially in the installation and configuration of the new storage system and the development and maintenance of the as middleware for the control of the experiment. I have previously worked implementing information retrieval system and using machine learning techniques for information extraction and discovery, mainly using languages like Python, Java and Scala. My interests include distributed systems, programming languages and data visualization.

**Gabriele CAMELLINI**

**CERN, Geneva - Switzerland**



I am an Italian student of computer engineering at the University of Parma. Now I'm working, as technical student, at CERN in PH-SFT on the development and test activities of a geometry modeler component of the Geant4 (toolkit for the simulation of the passage of particles through matter), by implementing new BREP solids and revising of the FLUGG package that allows to use Fluka simulation engine making use of Geant4 geometry modeler. I am familiar with Linux (SLC, Debian), Windows, uC platforms, with C, C++, Assembly, Java, SQL, HTML, PHP languages. I like sports especially in contact with nature like hiking on mountain or diving in the sea and work as volunteer as sport instructor for children (mountaineering). For work and passion I'm involved in underwater photography and video.

**Luciano CAPASSO**

**University of Naples - Italy**



I am 29 years old and I'm from Naples (*the most beautiful Italian cities:!*). I am a Ph.D. student at University "Federico II". In the last 3 years I learned to design digital hardware-software systems, based on FPGA technology and microprocessors. I actually work at the ATLAS Muon RPCs Read Out Driver board (ROD). In particular I developed the system (based on an ARM7 processor) responsible of the synchronization of the ROD with the LHC's clock and also a Real-Time system (in FPGA) that monitors the ROD Event Builder. As hobby I practice CAPOEIRA and play different percussive instruments. I also do electronic circuits on printed boards.

**Victor DIEZ  
GONZALEZ**

**CERN, Geneva - Switzerland**



I have studied computer science at Rovira i Virgili University, in Tarragona (Spain). I'm working at CERN since September 2008 in the PH-SFT group, inside the geant4 project. I have transmitted its nightly testing system to the LCG Applications Area Nightly Builds System, used by the rest of projects of the group. Currently I am working in that system, moving the results storage to a database and improving the presentation with AJAX technology and offering more views and statistics about the testing.

**Laurentiu Alexandru  
DUMITRU**

**National Institute for Physical and Nuclear Engineering, Bucharest - Romania**



I graduated in Denmark with bachelor of computer science in 2008. I am currently working at the National Institute for Physical and Nuclear Engineering in Romania. I am part of the IT staff, involved in the configuration and administration of RO-15-NIPNE grid site. I like programming in C/C++ and .NET. Also I am very fond of network administration and security.

**Jan ENGELS**

**DESY, Hamburg - Germany**



After studying Computer Science for 5 years in Coimbra (Portugal) I've entered my first job at DESY (Hamburg) in August 2006 and have since then been working as a software developer in the physics computing group. My main projects so far were the development of a GUI for the configuration of an application framework for data analysis and the implementation of a build and installation tool for the software tools used in the ILC community. I have been working exclusively in Linux environments for the past 3 years and during this time I realized how much I like working with this OS and my overall sympathy for the GNU/\*nix community =)

**Despoina  
EVANGELAKOU**

**Georg-August University Göttingen - Germany**



I am currently doing my PhD in the University of Göttingen and I am working for ATLAS on physics analysis. A good understanding of the computing environment and tools is necessary for doing analysis. Therefore, I have already basic experience with ATHENA (ATLAS analysis framework), ROOT and Grid.

**Gábor GAJDATSY****University of Szeged - Hungary**

As a PhD student I currently work on my thesis at the Department of Optics and Quantum Electronics, University of Szeged. The main field of my work is resolution enhancement of confocal microscopes using tomographic image reconstruction. Besides I am a researcher of the Institute of Engineering and Materials Science at the University where I develop numerical battery models for the automotive industry. Although these fields are relatively far from each other, both of them indicate a huge amount of numerical problems, such as algorithm optimization, boundary value problems, data storage and analysis, controlling actuators and sensors, etc. To solve these problems I use MATLAB scripts, C/C++ dynamic libraries and LabVIEW codes.

**Carlos GARCIA RODRIGUEZ****CERN, Geneva - Switzerland**

I am a senior J2EE programmer with several years of experience developing Web applications. I have been working in the GS-AIS-PM section at CERN since September 2007, starting just after finishing my degree in SW Engineering at the University of Oviedo (Spain). My main task at work are: Development of Project Management Software for large CERN projects (LHC construction, CERN medium term planning), based on Java EE technologies (Spring MVC, Apache Struts, Hibernate, iBatis, Oracle ADF, Groovy, Google Web Toolkit), deployed to Oracle 10g application servers. Administration and follow up of the team's continuous integration server (Cruise Control, Apache Maven, Linux)."

**Ana Maria GASPARD MARTINEZ****CERN, Geneva - Switzerland**

I'm a computer engineer who currently works at CERN in the SFT group in the Physics department for SPI (Software Process & Infrastructure) project. This project, provides software support to the LHC experiments and LCG Application Area (LCGAA) projects. The main task is to provide a test system called Nightly Builds. This system allows the LCG projects to be built and tested every night. Each project is built in different configurations (set of versions of Application Area packages that are supposed to work together) and in different platforms (set of different operating systems, architectures and compilers). Also, the SPI project is in charge of the installation of external packages needed by the LHC experiments and the LCGAA projects. My work in this project is to develop a multithread version of the nightly builds system to allow the test system use the most part of the capabilities of the machines where it runs. The system is developed in Python and uses Qmtest as a testing tool. I'm also in charge of installing and upgrading the external packages and helping in the maintenance of the current nightly builds system version.

**Carlos GHABROUS****CERN, Geneva - Switzerland**

I have studied Telecommunication Engineering at the University of Málaga, Spain, with emphasis in Communication Systems and Telematics, and before joining CERN I was involved in the WiMAX technology certification program and test system's design. I came first time to CERN in 2007 in order to finish my studies and write my master thesis, designing solutions for configuring remotely mobile devices and other mobile services. Currently, I hold a fellow position in IT/CS group and my work is related to the deployment and operation of mobile and radio services, and to the design and validation of new telecommunications network architectures. I mostly use PERL and PHP for self written applications, but I am also familiar with C and C++.

**Stephan HAENSEL****HEPHY, Vienna - Austria**

My work includes the simulation of detector layouts for future experiments like the upcoming upgrade of the CMS Tracker for the SLHC accelerator and the next generation International Linear Collider. This is done with LiC Detector Toy, a fast simulation tool for charged tracks based on MATLAB. I will be responsible for the programming parts of the online data acquisition for a test beam setup at DESY and the subsequent analysis of the obtained data. There a first prototype of a silicon external layer for the ILD experiment will be tested using the C++ based LCIO framework, which is the common data model for linear collider detector studies. In addition I will undertake the task of the analyses of various test beams with silicon microstrip sensors.

**Christian HARTL**

**CERN, Geneva - Switzerland**



In 2007 I joined the CMS experiment to work in the Level-1 trigger system, as a CERN doctoral student in physics. I am close to the trigger group of Vienna's HEPHY institute, which developed the Global Trigger, Global Muon Trigger, and Trigger Control System of CMS. My tasks currently focus on online software for the configuration, control, and monitoring of this hardware. I have developed web applications which serve GUIs for setup manipulation, hardware monitoring, and interaction with the configuration database. I have also designed the database storing full information about available Level-1 trigger menu versions of CMS.

**Marc HAUSARD**

**CC-IN2P3, Villeurbanne - France**



I work at CC-IN2P3 which is hosting the French Tier-1 centre of the LHC grid. As one of the main HEP computing center, CC-IN2P3 is in strong connection with CERN and other physics institutes all over the world. Being in the Operation Team, my work involves interactions with the local batch system as well as the mass storage system. Part of my role is also to take part in the development of a monitoring platform for the Operation Team with Nagios.

**Natascha HOERMANN**

**HEPHY, Vienna - Austria**



I am a PhD student at the Institute of High Energy Physics (HEPHY) in Vienna and currently working on physics analysis for the CMS experiment at CERN. My research area is the search for supersymmetry especially in the hadronic channel in events with top quarks and MET, to which I contribute within the SUSY working group. In the analysis I use the CMS software framework (CMSSW), the Physics Analysis Tools (PAT), ROOT for histogramming and the languages C++ and Python. Furthermore, I help to build up and support the grid computing software environment and the physics data transfers at our Tier-2 centre in Vienna.

**David HORAT**

**CERN, Geneva - Switzerland**



I was raised in Gran Canaria, a Spanish island near the African coast. There, I studied a M.Sc. in Computer Engineering at the ULPGC. Encouraged by my colleagues and friends, I decided to go abroad. I spent 6 months with an Erasmus scholarship in the German University FH NordAkademie, where I developed an eLearning platform based on Moodle and other tools. I later worked on my Master Thesis which focused on accessibility and usability on web applications. I graduated with distinction. I am currently working as a Software Engineer in the European Organization for Nuclear Research -CERN- specialized in grid and web technologies. I have also worked at Ericsson in its R&D labs as a specialist on communication protocols. Among other things, I have participated as a Moodle mentor in the Google Summer of Code program.

**Lukasz JANYST**

**CERN, Geneva - Switzerland**



I graduated from the Jagiellonian University in Krakow, Poland in October 2008 where I completed masters' studies in Computer Science. My thesis work involved dealing with the data model schema evolution issues of the ATLAS experiment and creating a framework, within the ROOT project, enabling users to read old data files. After graduation I worked for a short time on a prototype of a new C++ interpreter for ROOT and on the integration of the gLite grid middleware. I currently work for the Data Management group at CERN on a prototype of a nameserver for the CERN Advanced Storage Manager (CASTOR).

**Chad JARVIS**

**UCLA, Los Angeles – U.S.A.**



I am a post doctoral research associate with the University of California Los Angeles. I am located full time at CERN working on the CMS experiment. My main work so far has been preparing an analysis for data based on Monte Carlo simulations. I am looking for high  $p_T$  muons from new charge gauge bosons ( $W'$ ). Most of my work involves running on the LHD Grid and on a local UCLA batch system and then analyzing the results. I am familiar with Linux/Unix and Windows and the programming languages C/C++, FORTRAN, Python, Perl, and Bash.

**Pavel JEZ****Niels Bohr Institute, Copenhagen - Denmark**

I am a Ph.D student at Niels Bohr Institute in Copenhagen. At the moment I am involved in the commissioning and optimizing of the Tau trigger at the ATLAS experiment at CERN. My work is focused on the performance of the Tau trigger in the environment with multiple collisions per bunch crossing, so-called pile-up collisions. The study is done on the Monte Carlo samples produced with the Athena software framework. For my analysis I am using ROOT and its toolkit for multi-variate analysis in particular. The goal of my study is to find an ideal set of observables which can be used to select events with hadronically decaying tau leptons with the top performance in terms of signal efficiency and background rejection.

**Tuomo KALLIOKOSKI****University of Jyväskylä - Finland**

I am doing PhD work in EMMA (Experiment with MultiMuon Array), which is in CUPP (Centre for Underground Physics in Pyhäsalmi). I am also a bit involved with ALICE. Just before hearing about this school we were discussing about building a database of events recorded by EMMA. So this possibility to join the school is a great opportunity for me personally and our whole experiment. On computer side, I'm personally using Linux as my main OS, but for gaming also Windows. I have used Mac OS X also. I currently use Perl and C++ for programming.

**Svetozár KAPUSTA****CERN, Geneva - Switzerland**

Svetozar is graduated at the Faculty of Mathematics, Physics and Informatics at the Comenius University in Bratislava in 2003 obtaining a Mgr degree in Physics. His collaboration with CERN started in 2001 when he joined the ALICE Silicon Pixel Detector group as a summer student. Since 2004 he has been supporting the ALICE online physics community as a member of the ALICE Detector Control System team mainly in the field of schema and application design, optimization and data management. He joined the CERN openlab recently and is testing the Real-Time Query Capability of Physical Standby Databases.

**Anton KARNEYEU****Laboratoire d'Annecy-le-Vieux de Physique des Particules (LAPP) – France**

For my PhD thesis I am working on CMS. My activities connected with search of new particles. This includes simulation and analysis of signal from heavy neutrino and additional WR boson. During first year of thesis I was involved in commissioning of CMS Electromagnetic Calorimeter, the work was concerning programming of electronic cards.

**Mathias KASPAR****Georg-August University Göttingen - Germany**

Since January 2009, I am working at the Department of Medical Informatics in Göttingen. There I am a member of the medical grid projects team. Within the German grid infrastructure the project provides grid services for the biomedical community. Since I am working on the installation and configuration (Globus Toolkit, cfengine, ...) on a local visualization cluster. Another task of mine is the conception and integration of the visualization cluster into the German grid environment. My PhD is focusing on the topic of shared medical visualization from different sites for telemedical use cases.

**Anna KOTYNIA**

**GSI, Darmstadt - Germany**



I am working on simulations of heavy ion collisions done for the CBM experiment which is a part of FAIR facility in Darmstadt in Germany. My work is based on preparing software for designing detectors geometries and for simulations of detectors properties. My main field of work at this moment are simulations of the Silicon Tracking System (STS), the central detector of the CBM experiment. I work with ROOT (CBMROOT), and I am familiar with Windows and Linux operating systems and C++ programming language.

**Daniele Francesco KRUSE**

**CERN, Geneva - Switzerland**



I am 28 years old. I was born and raised in Rome, Italy. I studied computer science at the university of Rome "Tor Vergata" and finished my master's degree in 2008. I was an Erasmus student in 2004 in the "Universidad Autonoma" in Madrid and I was a CERN summer student in 2006. Now I am back at CERN for 1 or 2 years, working on performance monitoring of applications and vector programming in the PH/SFT group. I love to travel around the world and to listen to rock 'n roll music, and my favourite outdoor activity is paragliding. I am really looking forward to CSC2009 :)

**Stefan LOHN**

**CERN, Geneva - Switzerland**



After graduating from university of Bonn in computer science last year, I got the opportunity to work for the Machine Interlock Section in the former AB-CO Group at CERN. Now I am working for the ALICE project since April this year as PhD student. My task is to parallelise the AliRoot software framework for a optimal exploitation of multi-core processors. Therefore, it is necessary to utilize different kinds of tools and techniques to find bottlenecks and strategies to solve the problems of scalability. Currently, I am working on monitoring, benchmarking and profiling wherein valgrind, VTune and inbuilt methods of AliRoot are applied.

**Jose Pedro MACEDO ALVES FERREIRA**

**CERN, Geneva - Switzerland**



I got my MSc in Informatics Engineering and Computing from University of Porto, in 2008, after spending one year as a Technical Student at CERN's IT-UDS group, working as a developer for the Indico project. In July 2008, I came back to CERN, as a fellow, once again working for Indico. My work covers a wide range of fields and technologies, from system deployment and administration to web interface design, as well as the development of scalable and performance-optimized solutions for storage, indexing and retrieval of event metadata. Due to my involvement with Indico, I have spent the last couple of years developing Python/JavaScript code, using the ZODB object oriented database, and exploring the latest innovations in web interface technology.

**Joris MAES**

**Vrije Universiteit Brussels - Belgium**



After finishing my master in physics I started working as a PhD researcher at the Vrije Universiteit Brussels (VUB) on the CMS experiment. My main topic is setting up an analysis for measuring the efficiency of b identification algorithms. These algorithms, so-called b-tagging algorithms, aim for identifying jets coming from b quarks which play an important role in various physics analysis.

I'm also involved in computing related projects. Within CMS I've been involved in the production of the MC samples used by the physics community. I've also been working on the testing and commissioning of up and down links between T1 and T2 centers. At this moment I'm one of the members of the central CMSSW deployment team. Together with some colleagues we install the main physics software on the various T2s in CMS. Besides this I'm helping in defining and setting up an analysis operations task force for monitoring and improving the grid use for physics analysis in CMS.



**Rachid MD  
MAMUNUR**

**CERN, Geneva - Switzerland**



PhD student working for LHCb at CERN to elaborate a new dataflow for using non-conventional Computing resources in a Grid computing environment and monitor its behaviour. As present mechanisms are thriving to manage and process huge amounts of data from scientific experiments within a limited time on remote/distributed resources. The proposed work is aimed to increase the computational power of conventional computer systems by using additional so-called opportunistic resources, i.e. computing resources that are not part of a computing centre with batch and data storage systems. The goal is to elaborate a suitable Dataflow Architecture based on existing (to define) tools, apply it to a Grid Environment including Data management and job Scheduling strategy, proves feasibility and efficiency. Along with this I am also considering the site virtualization for remote machine job execution as a research on opportunistic resource search.

**Melvin MEIJER**

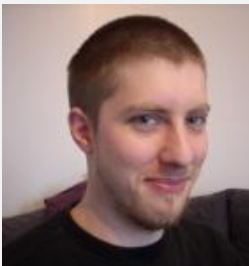
**Radboud University Nijmegen – The Netherlands**



I am a 2nd year PhD student at the Radboud University, Nijmegen, and a member of the D0 collaboration at Fermilab. My physics analysis is part of the search for a low mass Standard Model Higgs Boson, where I'm studying the decay of  $W$  to  $W H$  to  $\tau \nu_{bb}$ . I also worked for the tracking group of D0, by helping to make use of timing information provided by a new readout system of the CFT (Central Fiber Tracker) in order to reduce the number of fake tracks from the tracking algorithm.

**Tim MUENCHEN**

**Bergische Universität Wuppertal - Germany**



I studied computer science at the University of Applied Sciences, Münster, and got my master's degree in 2007. In 2008, I started to work on my PhD thesis at the ATLAS working group of the University of Wuppertal. I am continuing development on the user space job monitoring software, JEM, created at Wuppertal, and focus on the user interface (integration in the job submission and management tool 'ganga') and a binary tracing module allowing to monitor (athena-) user algorithms written in C++.

**Luis Fernando  
MUNOZ MEJÍAS**

**CERN, Geneva - Switzerland**



I am working on a central log service for the Computer Security Team, which should allow for easier identification of ongoing attacks and faster forensics analysis of . For this project I have already developed some modules for rsyslog (in C language), as well as some database designs and queries and scripts to use them (SQL, PL/SQL, Python, C, Perl). This task involves also some understanding on SELinux policies, how to write them and how to enforce minimum privileges. I'm also a skilled C++ programmer, although probably not as efficient as I am in Perl, Python, C and bash scripting which are my "working languages". Occasionally I maintain parts of Quattor for which I'm an author. I'm mostly familiar with Linux at systems administrator, user and low-level application levels, although have some knowledge of Windows.

**Friederike NOWAK**

**University of Hamburg - Germany**



I am PhD student at the University of Hamburg (Germany) and I work for the CMS experiment. Among other things I am responsible for developing monitoring tools for Tier 1, Tier 2, and Tier 3 centers. This is done on Linux. I am familiar with Perl, Python, and C++

**Malte NUHN****RWTH, Aachen - Germany**

I am a studying physics at RWTH Aachen University and I am currently writing my Diploma Thesis in the field of Grid-Computing. I'm interested in advanced monitoring, statistical analysis and diagnosis of individual grid-jobs. Besides that I am studying computer science and plan to work in the field of machine-learning and pattern-recognition.

**Markus OSTERHOFF****Georg-August University Göttingen - Germany**

In collaboration between the University of Göttingen and the European Synchrotron Radiation Facility in Grenoble, France, I am working in a PhD project on numerical methods to optimize Multilayer Mirrors for X-ray focusing. In order to simulate wave propagation and diffraction (small wavelengths, but large objects), parallel algorithms and distributed calculations (MIMD) are necessary. So far, I am using C, Perl and a little bit IDL together with Shared Memory, Message Passing, and Cuda technologies; also Monte Carlo methods and LA packages are needed. In my diploma thesis I studied the effects of real structure effects on X-ray propagation in waveguides. My favorite editor is Vim.

**Andrea PARENTI****DESY, Hamburg - Germany**

I am working at the Deutsches Elektronen-Synchrotron (DESY) in Hamburg, Germany, for the ZEUS and CMS experiments. I am the Monte Carlo Coordinator for the ZEUS experiment: my tasks are to guarantee a smooth processing of Monte Carlo events, coordinate people working on the simulation software, build-up new versions of the Monte Carlo software. I also made analysis of the ZEUS data using Fortran and PAW. In CMS I am involved in the alignment of the silicon tracker. I am responsible for a package of perl scripts helping in managing a large amount of alignment jobs. I am also doing alignment studies with Monte Carlo events; the software we use for this is C++/root based.

**Raquel PEZOA****Universidad Technica Federico Santa Maria, Valparaiso - Chile**

I am a computer scientist and I am currently working for the Universidad Técnica Federico Santa María (UTFSM) in Valparaíso, Chile. I am part of the Center for Technological Innovation on High Performance Computing (CTI-HPC) and the Physics Department. I already got my Master in Computer Science and now I mainly work on grid computing area and I am starting to work on physics computing. I have been at CERN two times, the first one in 2007, where I worked with the ATLAS Distributed Computing (ADC) group and I developed a system called ATLAS Accounting System. Then in 2008, I returned to work on the ATLAS Grid Information System which was also my master thesis topic.

**Roko PLESTINA****Fakultet elektrotehnike, strojarstva i brodogradnje, Split - Croatia**

I am a first year PhD student at University of Split, Croatia. My group is involved in search for the SM Higgs boson decaying into four leptons via two intermediate Z bosons with CMS detector at CERN. CMS is general purpose particle detector and one of its main goals is to search for Higgs boson. I am particularly involved in lepton isolation studies. Most of the work is being done using common CMS analysis software (ROOT, CMSSW ...) in UNIX/Linux OS.

**Gianni PUCCIANI**

**CERN, Geneva - Switzerland**



I am currently working at CERN in the IT Grid Deployment group where I am coordinating the testing activity done for certifying the quality of the gLite middleware. I am also responsible of the monitoring system (based on Nagios) used in our testbed. I have a Ph.D. in Information Engineering from the University of Pisa with a thesis on the replica consistency problem for Data Grids. I have previously worked at INFN, and at CERN as Ph.D. student, where I was developing and testing software for Grids and data storage. My main interests at the moment are Grid technologies and monitoring and testing automation software.

**Benjamin RADBURN SMITH**

**STFC Rutherford Appleton Laboratory, Didcot – U.K.**



I am a first year PhD student with the University of Manchester studying data mining and visualisation of particle physics datasets. I am currently based at the Rutherford Appleton Laboratory (RAL) in the UK working between the CMS group and e-Science Scientific Applications Group. The visualisation techniques I am investigating include parallel coordinates and the grand tour. The aim of the project is to create a program which is compatible with ROOT that will implement these techniques. The program is being written in C++ for Linux based systems but will be developed to run on other systems as well.

**Hassen RIAHI**

**Universita di Perugia - Italy**



I am a computer engineer and a Ph.D. student at University of Perugia, Mathematics and Computer Sciences Department. I'm a member of CMS Computing developer team working on CRAB (CMS workload management tool). I'm involved in the development, debug and test. However, I'm working for Italy Tier3 centre at Perugia as member of site administrator's team. I'm participating to the maintenance, installation, configuration and problem resolution of the GRID local farm. In particular, I'm the responsible of Perugia data storage infrastructure of CMS which is managed by d-cache. Moreover, I'm a responsible of Data Management and Phedex operation. I have been working for an experts centre of HP as support engineer during nine months and I followed intensive trainings of HP-UX OS and HP DataProtector application. I work normally with Linux, Unix (HP-UX, Solaris), Shell, Python, Java, JSP/servlet."

**William A. ROMERO RAMIREZ**

**Universidad de los Andes, Bogotá - Colombia**



I am a systems and computing engineer. I worked as CERN openlab summer student in the performance monitoring of the software frameworks for LHC experiments. My current work focuses on the development of collaborative visualization tools for science and engineering applications in order to work with large-scale and complex datasets from simulation applications. My research interests lie in applied scientific computing particularly with respect to modelling and simulation.

**Alexander RUNDE**

**Georg-August University Göttingen - Germany**



I've been a bachelor student at the University of Göttingen (Germany) for 3 year. Within the last year I have made contact with particle physics. In my recently finished bachelor thesis I have worked on a ROOT based analysis for the reconstruction of a light higgs boson in di-tau channel, produced in vector boson fusion. At the moment I am looking forward to my work at CERN within the stationed Göttingen's group, where I will look into likelihood-distributions for top-quarks. Due to my work done in the bachelor thesis I am familiar with ROOT and #C."

**Mohammed SALIM  
MALIYEKKAL**

**Aligarh Muslim University - India**



I am working as a PhD student in Aligarh Muslim University, India. Currently I am working with India based Neutrino Observatory (INO) team for developing a Geant4 based simulation package. My main task is code development for track reconstruction using Kalman Filter technique. My programming skills include C, C++ and ROOT. I am also using Geant4.

**Jaroslava  
SCHOVANCOVÁ**

**ASCR, Prague – Czech Republic**



I am a first-year PhD student at the Institute of Physics, ASCR, v. v. i. working in the Top Quark Physics Working Group on the ATLAS experiment. As a part of my PhD studies I am involved in the ATLAS Distributed Computing Operations Shifts. I'm also engaged in the EGEE project, currently as a Regional Coordinator. I am part of the Grid production team of the Pierre Auger Observatory at the Institute. I like python and C/C++ programming, shell scripting, Linux, Grid Computing, and Django web framework.

**Michal SIMON**

**CERN, Geneva - Switzerland**



I am a doctoral student at Silesian University of Technology. I obtained MSc Eng in Computer Science last year, I worked at my MSc thesis at DESY in Hamburg. At the moment I am working as a CERN doctoral student in data acquisition group in CMS experiment. My thesis main goals are studies of scalability, analysis of performance (speed, memory consumption) and stability particularly in the areas of communication between Run Control System components, communication between the Run Control System and the applications, communication with the database. I am also working on development of a security component as well as design and implementation of fault tolerance in the system such as dynamic recovery of crashed processes, dynamic masking of faulty hardware or dynamic reconfiguration.

**David SINUELA  
PASTOR**

**CERN, Geneva - Switzerland**



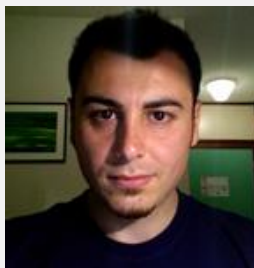
My current work consists in the development of raytracing functionality inside the FLUKA simulator (<http://www.fluka.org>). Currently the only way to visualize the geometry given to the simulation is by 2d plane cuts drawn by gnuplot, the aim is to have a 3 dimensional representation of the geometry. The implementation is currently working, made in C language but thinking in a posterior conversion to FORTRAN 77. Given the limitations of FORTRAN 77, the main algorithm has been converted to be iterative instead of recursive, using a binary tree implemented in a fixed size array (there is not dynamic memory allocation in F77). Now I'm converting the code to FORTRAN and it will hopefully merged with the main FLUKA code by the end of this year. - I feel more comfortable working with linux systems. Languages: C, C++, Java, Ruby, Python, Fortran, Shell scripting, Javascript, etc. - I'll use my work at CERN as my thesis, and this year I'll obtain the MSc degree.

**Therese SJURSEN**

**University of Bergen - Norway**



I am currently a PhD student in the experimental particle physics group at the University of Bergen. So far my main focus has been on preparing analysis tools for the search for Supersymmetry in the ATLAS detector at the LHC. By analysing Monte Carlo simulated data the aim is develop methods to suppress background from well known Standard Model physics scenarios to enable discovery of new physics, such as Supersymmetry, occurring with a much lower probability in the experiment.

**Ugur Emrah SURAT****METU, Ankara - Turkey**

After getting my bachelor degree in Astrophysics, I started to work as a MSc. student at METU in Turkey participating in the CMS Experiment at CERN. Last year I have initiated in Exotica Group where I dealt with Large Extra Dimension phenomenology particularly ADD model, looking for monojet channel. My contribution focused on applying the compatible L1 and HLT trigger and eliminating the detector effects for start-up conditions. I am also a member of Detector Performance Group in CMS where i involved in HCAL subsystem in parallel to my studies.

**David SVANTESSON****CERN, Geneva - Switzerland**

I am currently a technical student at the Online group of LHCb at CERN. My main tasks are development and improvements of the control system and error tracking for the data acquisition system. My work will be part of my M.Sc. thesis in physics from Chalmers University (Sweden). In my work I mostly use C, C++ and the SCADA system PVSS. I am also familiar with other computer languages as Java, PHP, Javascript, MySQL, Matlab, LaTeX, bash scripts. I use actively and configure different Linux/UNIX systems and occasionally Windows.

**Bayram TALI****Cukurova Universiyt, Adana - Turkey**

I am a PhD student at Cukurova University in Adana. We have a big group involved in the hadronic calorimeter (HCAL) of the CMS experiment. We contributed mainly to hadronic forward (HF) and CASTOR calorimeters which are the forward detectors of CMS. Our group is also working on several physics topics like forward physics, heavy ions, SUSY search. I basically contributed to the construction, commissioning and test beam analysis of the CASTOR and also tested the PMTs to be used in CASTOR in our laboratory in Adana. In my analysis I used CMSSW, ROOT and C++. My work on CASTOR is still continuing. Before joining CMS I spent one year at Aristotle University of Thessaloniki as a member of the ARTEMIS project which was involved in Higgs analysis at ATLAS where I also used ATLAS software ATHENA.

**Adriana TELESCA****CERN, Geneva - Switzerland**

I was born in Italy and I graduated in Telecommunication and Electronics Engineering in December 2007. I have been working at CERN since November 2008. As a Marie Curie fellow I am part of the data acquisition team of the ALICE experiment and I am in charge of the Transient Data Storage System. In particular, I am working on the rate performance analysis of the Data Storage in order to find the configuration which provides the highest system throughput and I am adding monitoring functionalities in order to detect failures of the system and integrating them into the CERN Lemon alarm tool.

**Joni Jukka  
VÄLIMAA****Helsinki Institute of Physics - Finland**

I am a graduate student and my studies are related to CMS GRID-computing and CMS physics analysis with GRID and PROOF. Currently I am developing our local GRID-system at University of Helsinki. Previously I was working for nine years with telephone switches and got familiar with real time computing and telecommunications. Most familiar I am with proprietary RTOs used in Nokia like chorusOS and DMX. As an user level I am familiar most unix variants and windows. Most familiar programming languages for me are C and assembly (mostly i386, somewhat powerPC), which I used in my previous work. More generally a can at least read C++, fortran and java, although I never have done any serious work with them.

**Adrian VOGEL**

**Universität Bonn - Germany**



I am currently working on software development for a fast simulation of the ATLAS tracking detectors, which means I'm programming in C++ within the Athena environment. My task is to implement a connection to the conditions data subsystem, allowing dead and noisy channels to be treated properly in the detector simulation. Before that, I worked at DESY and did simulations of beam-induced backgrounds in detectors at the International Linear Collider, trying to estimate the impact of background particles which get created in large amounts during each bunch crossing and which can then smash into the forward instrumentation. For these studies I did Geant4-based programming in C++ as well, but I also needed to deal with MySQL, PHP, XML, and some shell scripting. Furthermore, I gained some experience with the gLite middleware by running my jobs and storing my data on Grid resources.

**Uwe WESTERHOFF**

**Institut für Kernphysik, Münster – Germany**



I am working as a PhD student at the "Institut für Kernphysik" in Münster for the ALICE experiment. In my diploma thesis I have developed the online control software for the Transition Radiation Detector of ALICE. Currently I am involved in the development of online particle identification methods for the Transition Radiation Detector to identify electrons with high transverse momenta in pp and heavy ion collisions within a few micro seconds. Furthermore I am the system administrator of our computer network and involved in the maintenance of a 100 CPU cluster, which is part of the ALICE computing grid.

**Cenek ZACH**

**FNSPE at CTU, Prague – Czech Republic**



I was born in Varnsdorf in Czech Republic, where I attended basic school. Then I attended grammar school in nearby city Rumburk. Now I have been studying Experimental Nuclear Physics at FNSPE at CTU in Prague four years. Currently I'm working on my diploma concerning simulating computing grid and looking after our local computing cluster.