

Alexandre Vaniachine

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Dr. Alexandre Vaniachine is a Software Engineer working on core database software for the management, processing and analysis of data from the ATLAS experiment, with particular emphasis on very large scientific databases and scalability issues of handling and access to the multi-petabyte ATLAS data set.

In ATLAS Computing organization Dr. Vaniachine serves as a co-coordinator of ATLAS Database Development, Deployment and Operations activity and a chair of the Conditions DB Operations Task Force – a joint effort of ATLAS Database and Distributed Computing activities. In 2006-2008 he led the high-profile Database Deployment & Operations (DDO) activity for the development and deployment (in collaboration with the WLCG project on Distributed Deployment of Databases) of the tools that allowed the worldwide distribution and installation of databases and related datasets, as well as the actual operation of this system. In 2007 the WLCG project on Distributed Deployment of Databases successfully deployed in production operations one of the largest distributed database systems worldwide; this was accomplished with essential contribution of the ATLAS DDO team. In 2004-2006 Dr. Vaniachine led the Distributed Database Services area within the ATLAS Database Project.

He is a member of ATLAS Computing Management Board, ATLAS Computing Operations Coordination Group, and ATLAS Database Coordination Group.

Dr. Vaniachine is a PI and co-PI of several projects developing advanced database access technologies for distributed computing.

According to the American Institute of Scientific Information citations database the 38 articles in refereed journals authored by Dr. Vaniachine were cited more than 1400 times, achieving an impact factor (number of citations) which is 15 times higher than average.

Dr. Vaniachine received M.Sc. and Ph.D. degrees in Physics from Moscow Engineering Physics Institute, Russia and has worked there in the High Energy Physics group led by Prof. Dolgoshein. (This group pioneered silicon photomultiplier development and applications in High Energy Physics.) Dr. Vaniachine has also acquired experience working at the CERN laboratory in Switzerland, and SSCL, BNL and LBNL laboratories in USA.

MEMBERSHIP IN SCIENTIFIC ASSOCIATIONS:

- European Organization for Nuclear Research (CERN), associated member of personnel since 1989
- American Association of Physicists in Medicine (AAPM), elected full member since 1999