



Contribution ID: 71

Type: **not specified**

Development of the Geometry Information System for the NICA experiments

Thursday, 22 October 2020 17:10 (20 minutes)

RFBR grant 18-02-40125

The report is dedicated to the Geometry Information System based on the Geometry Database, which is developed for the experiments of the NICA project. The feature of the NICA experiments is a similar approach to storing detector geometries and methods to use them, which employ ROOT or ASCII (.geo) formats and common interfaces of the FairRoot software developed by the FAIR collaboration. The main purpose of the system is to provide a centralized storage of detector geometries, which are actively used in detector simulation and data processing, convenient tools for managing geometry modules, and ensure versioning of the setup assemblies as a combination of the modules and additional support files. The unification of the Geometry Database allows to minimize the cost of creating and maintaining a geometry database for each experiment. The report shows the structure of the Geometry Database, access roles and its implementation features. An important part of any information system – interfaces, such as Application Programming Interface (API) and user-friendly Web interface, will be also presented.

Presenter: ALEXANDROV, Evgeny (JINR)

Session Classification: Parallel session II