
Subject: Re: European Nuclear Physics Conference
Posted by [StefanoSpataro](#) on Mon, 15 Dec 2008 10:35:40 GMT
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Hi,

I will submit an abstract for a PandaRoot group report talk.
Here you are the text of the abstract (agreed by Johan).

The PandaRoot framework for simulation and analysis
Stefano Spataro for the PANDA Collaboration
Toggle Spoiler

The Panda experiment at the future FAIR facility in Darmstadt will study anti-proton proton and anti-proton nucleus collisions with beam momenta up to 15 GeV/c.

To simulate the detector performance for the physics program (involving charm spectroscopy, electromagnetic form factors, hypernuclei, etc.) and to evaluate different detector concepts, a software framework is presently under development, called "PandaRoot".

The "PandaRoot" software is installed and tested on more than 20 platforms. It is mainly based on ROOT and Virtual Monte Carlo packages, and it runs on an Alien-based GRID infrastructure.

Several event generators and transport models can be used by changing few macro options. This allows an easy comparison and validation of results. Different algorithms for tracking and reconstruction are under development and optimization, to achieve the requirements of the experiment in terms of performances. Moreover, the analysis tools framework, Rho, has been implemented as well as a fast simulation code.

In this report a status of the current activities inside the PandaRoot framework will be presented, in terms of detector simulations, reconstruction algorithms and analysis of physics benchmark channels.

This work was supported in part by BMBF (06 GI 180) and GSI (GIKÜH).

If you want to add your grant number, please just send it to me before 17:00 of today, and I will add it to the abstract.

Thanks.
