QRNG Webservice Version 1.0

1 Introduction

The QRNG Webservice plug-in allows Fairmat to use a *free* service hosted by the physic department of the university of Berlin as source of random numbers needed from Fairmat for the Monte-Carlo simulation. Random numbers are generated by exploiting quantum physic properties: from the authors: *We provide a new quantum random number generator (QRNG) based on the quantum randomness of photon arrival times. It promises provable and long term statistical quality, speed as well as affordability (see* `http://qrng.physik.hu-berlin.de` *for more details).*

2 How to use the plug-in

In order to use this plug-ins you have to follow the steps below:

- Register to to the QRNG page `http://qrng.physik.hu-berlin.de/register/` and retrieve your credentials to access to the service.
- From the Fairmat main menu open **Settings / Fairmat Preferences / Plug-ins Preferences**, select *qrng.physik.hu-berlin.de Settings* and enter your QRNG credentials.
- Again **Settings / Fairmat Preferences / Plug-ins Preferences** select *Random Source Settings* and select *Qrng.physik.hu-berlin webservice*.
- Finally, choose the the Random Source Support plug-ins as random generator in Fairmat: go to **Fairmat Preferences / Advanced** and select "RandomSourcesSupport.RandomSourcesManager" as Random Generator.