

Status of the Monte Carlo Simulation

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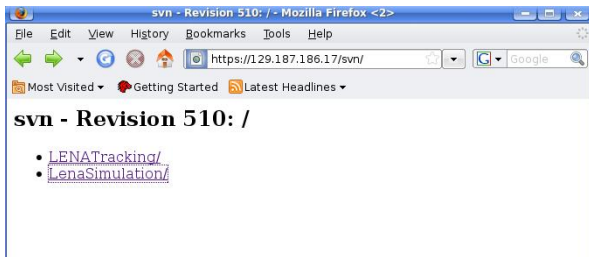
20.02.2012

1 SVN Server Tutorial

2 New Developments

How to get the code

- The code is hosted by a subversion server
- You can access this server via 'https://129.187.186.17/svn/'
- You can browse the repository with a standard web browser



- To checkout a working copy, you need to have a subversion client
- Subversion is open source, you can download the software from 'http://subversion.apache.org/'

How to get the code

- You can checkout a working copy of the LENA simulation with the command: 'svn checkout <https://129.187.186.17/svn/LenaSimulation/trunk>'
- Username: **Lena**
- Password: **LenaSim001**
- This general user can read files, but it can not change any files or upload new files

Installation

- To run the LENA simulation you need to have GEANT4 (Version 4.9.3 or 4.9.4 including all data files!) and ROOT (Version 5.20 or later) installed
- After you checked out the working copy, compile the code with **make**
- You can find an extensive documentation, including a Tutorial and many examples in the folder './doc/userdoc/userdoc.pdf' of your working copy (you can also access this documentation with your web browser via
'<https://129.187.186.17/svn/LenaSimulation/trunk/doc/userdoc>)

Working with the code

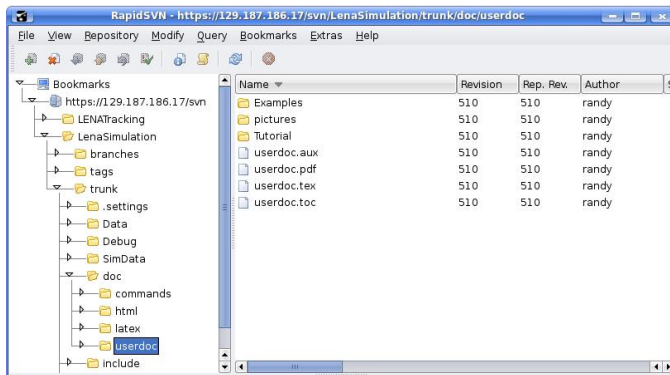
- You can make any changes that you want to your working copy
- If the code is changed on the server, you can update your working copy with the command '**svn update**'
- In case of any file conflicts, subversion will try to resolve them.
- If subversion can't resolve the conflict, it will tell you where the conflict is, so that can solve it manually
- You can find an extensive documentation of subversion under '<http://svnbook.red-bean.com/en/1.7/index.html>'

Uploading changes to the server

- You can upload changes and new files with the command '**svn commit**'
- If you commit a new version, please add a short comment about your changes, e.g 'svn commit -m "included new class LenaTest" '
- You can only commit new versions with a personalized account, to get one just send me a short email (randolph.moellenberg@ph.tum.de)

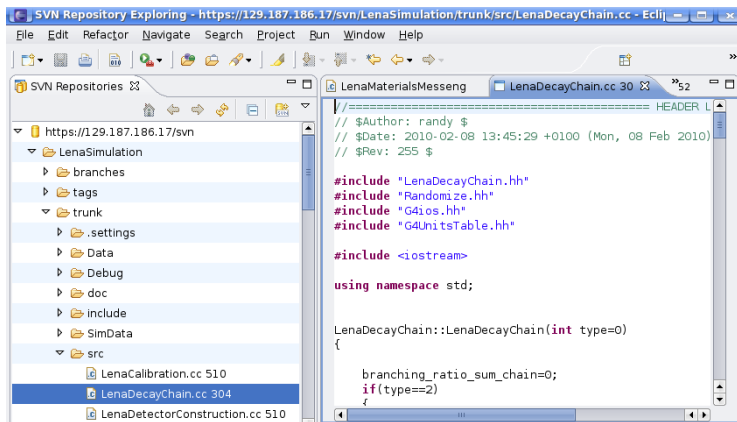
Third party tools, RapidSVN

RapidSVN is one of several available third party tools for svn. It is an open source (<http://www.rapidsvn.org/>) cross platform GUI client (Linux, Mac OS X, Windows..)



Third party tools, Subclipse

Subclipse (<http://subclipse.tigris.org/>) is an open source client that is directly integrated to the eclipse development environment



Geometrical Winston Cones Model

A geometrical Winston Cone model was implemented. This model is more realistic, but also increases the computation time by 50%.

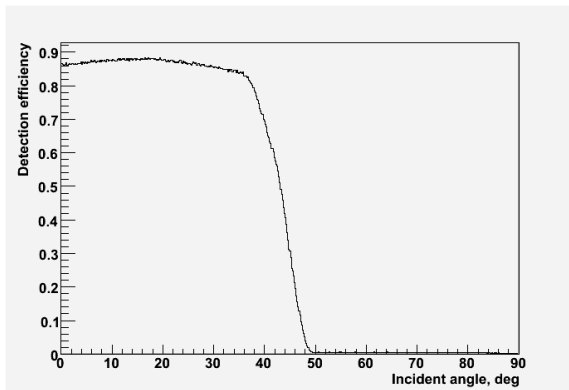


Figure: The simulated dependence of the detection efficiency on the incident photon angle.