

BornAgain - Refactoring #1076

make math code more readable

12 May 2015 12:30 - wuttke

Status:	Rejected	Start date:	12 May 2015
Priority:	Low	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:			

Description

Adapt extant math code (e.g. form factor calculations) to the following agreed conventions:

- In a source file that contains several calls to sqrt, exp, sin, and the like: use "using namespace std"
- Ditto, when there are calls to sinc: "using namespace MathFunctions"
- Change Sinc into sinc: when it comes to the readability of formulae, math conventions are more important than project-wide coding conventions
- At single source file level, define $I = \text{complex_t}(0.0, 1.0)$.
- Add function $\text{sqr}(x)=x*x$ to MathFunctions
- Never introduce auxiliary variables like $m_root3 = \text{std}::\text{sqrt}(3.0)$; leave it to the compiler to replace $\text{'sqrt}(3)$ by a constant.

History

#1 - 13 May 2015 13:42 - wuttke

- Subject changed from to discuss: conventions to make math code more readable to make math code more readable
- Description updated
- Status changed from New to Long Term Idea
- Priority changed from Normal to Low

#2 - 02 Jun 2015 14:34 - wuttke

- Status changed from Long Term Idea to Rejected

no need to have this in the issue tracker; let's just improve things as we pass by