

BornAgain - Bug #900

Envelope task # 424 (Archived): === PythonAPI ===

Custom form factors in python do not work with multithreading

13 Nov 2014 13:36 - herck

Status:	Rejected	Start date:	13 Nov 2014
Priority:	Low	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:			
Description			

History

#1 - 15 Apr 2015 16:50 - herck

- Priority changed from Normal to Low

#2 - 02 Feb 2016 09:29 - wuttke

- Parent task set to #424

#3 - 30 Mar 2016 17:03 - jmfisher

This appears to be a consequence of the global interpreter lock in Python, which prevents calls to the Python interpreter from being executed in parallel. Since the inner loops of `Simulation::runSimulation()` must call `CustomFormFactor.evaluate_for_q()` via the Python interpreter, the GIL creates a bottleneck which effectively gives single-threaded performance.

#4 - 30 May 2016 11:01 - wuttke

Suggestion: Declare this a feature, update the documentation of `CustomFormFactor`, and close this issue. Serious work must be done in C++. Only come back to this if it turns out to be limiting for an otherwise productive user.

#5 - 31 May 2016 11:47 - wuttke

- Status changed from Backlog to Rejected

as agreed in meeting