

## BornAgain - Bug #1571

Feature # 1290 (Rejected): === Core: framework ===

Feature # 1572 (Rejected): == Python ==

### PyCoreTest overlooks complete obstruction of simulation

03 Aug 2016 18:49 - wuttke

<b>Status:</b>	Archived	<b>Start date:</b>	03 Aug 2016
<b>Priority:</b>	Urgent	<b>Due date:</b>	
<b>Assignee:</b>	wuttke	<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	Sprint32		
<b>Description</b>			
Let the Python function <code>getSample()</code> , exported by <code>ExportToPython</code> , return <code>None</code> instead of a multilayer. Then			
<pre>\$ bin/PyCoreStandardTest HexParaCrystal Core simulation will be compared with /G/ba/build/tmp/pysuite_HexParaCrystal_out generated by command '/usr/bin/python2.7 /G/ba/build/tmp/pysuite_HexParaCrystal.py' Traceback (most recent call last):   File "/G/ba/build/tmp/pysuite_HexParaCrystal.py", line 75, in &lt;module&gt;     runSimulation("/G/ba/build/tmp/pysuite_HexParaCrystal_out")   File "/G/ba/build/tmp/pysuite_HexParaCrystal.py", line 68, in runSimulation     simulation.setSample(sample)   File "/G/ba/build/lib/libBornAgainCore.py", line 15054, in setSample     return _libBornAgainCore.Simulation_setSample(self, sample) ValueError: invalid null reference in method 'Simulation_setSample', argument 2 of type 'ISample const &amp;' HexParaCrystal      Interference function of 2D hexagonal pa[SUCCESS]      1.0004e-13</pre>			
When just running <code>ctest</code> , all this output is overlooked since the test passes. This indicates two problems, possibly unrelated:			
<ul style="list-style-type: none"><li>• The <code>ValueError</code> is somehow caught, and not detected by <code>CTest</code>.</li><li>• A numeric agreement of <math>1e-13</math> is found, although the simulation has no chance to return anything but zeros. This is perhaps related with the dubitable definition of <code>almostEqual</code> (<a href="#">#1541</a>)</li></ul>			

### History

#### #1 - 03 Aug 2016 19:06 - wuttke

- Parent task changed from #1290 to #1572

#### #2 - 04 Aug 2016 16:22 - wuttke

- Status changed from *New* to *Sprint*

- Assignee set to *wuttke*

- Target version set to *Sprint32*

#### #3 - 04 Aug 2016 17:58 - wuttke

Resolved in `cdc32a6`, except for the possible failure to detect zero-filled detector images.

#### #4 - 08 Aug 2016 15:56 - wuttke

- Status changed from *Sprint* to *Resolved*

Errors now do appear in the `CTest` output.

Insensitivity of the tests to empty simulation output cannot be confirmed.

Rather, I was misled by output from roughness simulation, which looks all zero, but is not.

**#5 - 11 Nov 2016 14:48 - herck**

*- Status changed from Resolved to Archived*