Integrating solenoid code & GUINEA-PIG slicing

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26. of April, 2012

Introduction

- Status of IR tracking code integration into PLACET (experimental solenoid inclusion)
- Study of the relevance of slicing in GUINEA-PIG

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- Code has been checked and tracks correctly without solenoid active. Solenoid part still needs some debugging.
- New command(-s) in the TCL interface ready.
- Simulation procedure kept similar to previous philosophy of Barbara.
- Development can be followed in cvs branch "irtracking".

Example:

```
...
TclCall -script {save_beam $name1}
...
BeamlineUse -name test.ffs
TestNoCorrection -beam beam1 -emitt_file
    emitt.dat
...
BeamRead -file $name1 -beam beam2
BeamlineUse -name test.ffs.last
TestIntRegion -beam beam2 -emitt_file emitt.dat
     -angle 0.007 -step 0.005 -synrad 1
    -filename SiD+antiDID_2005.txt
```

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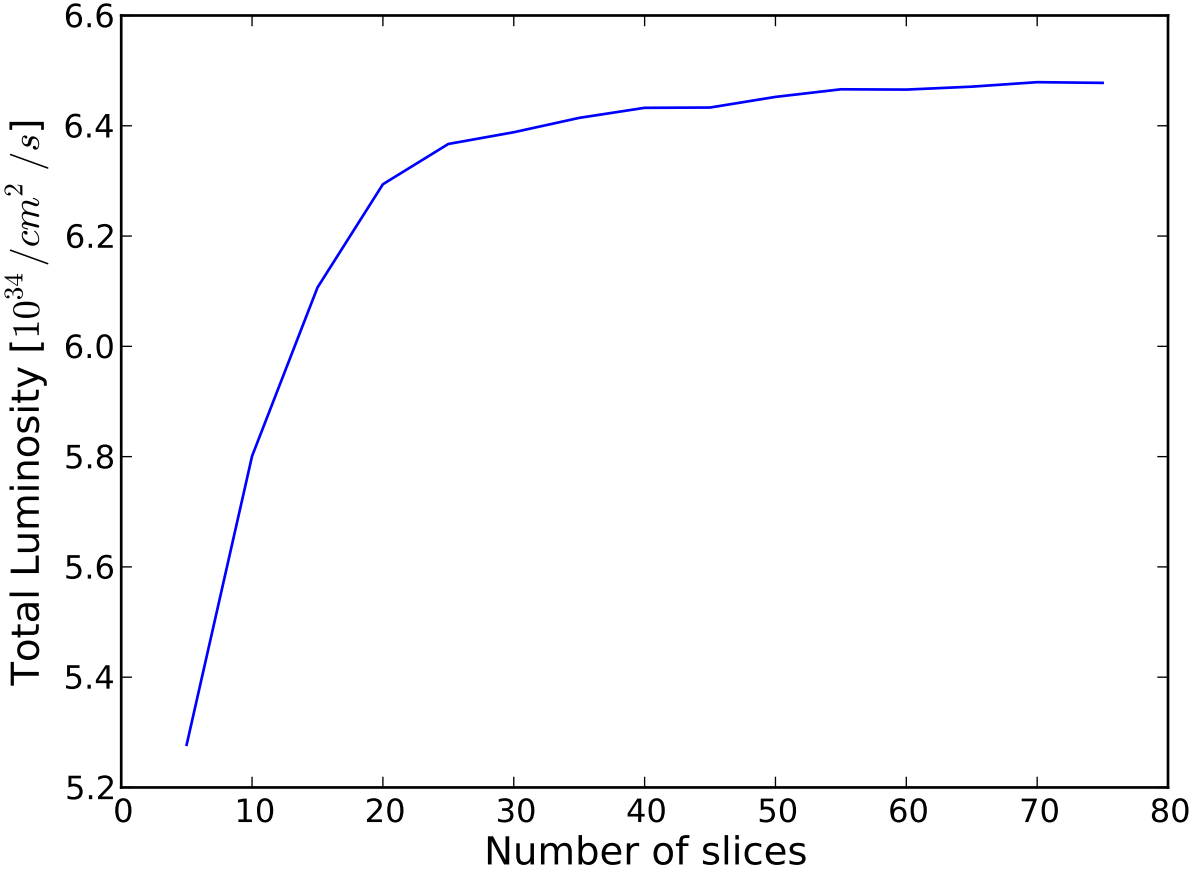
- Results can be found in `http://cern.ch/yngve/placet_testing`...

GUINEA-PIG slicing

Increased cut_x,cut_y to 400/35. 600 000 particles in total (constant) -> more than 8000 particles per slice.



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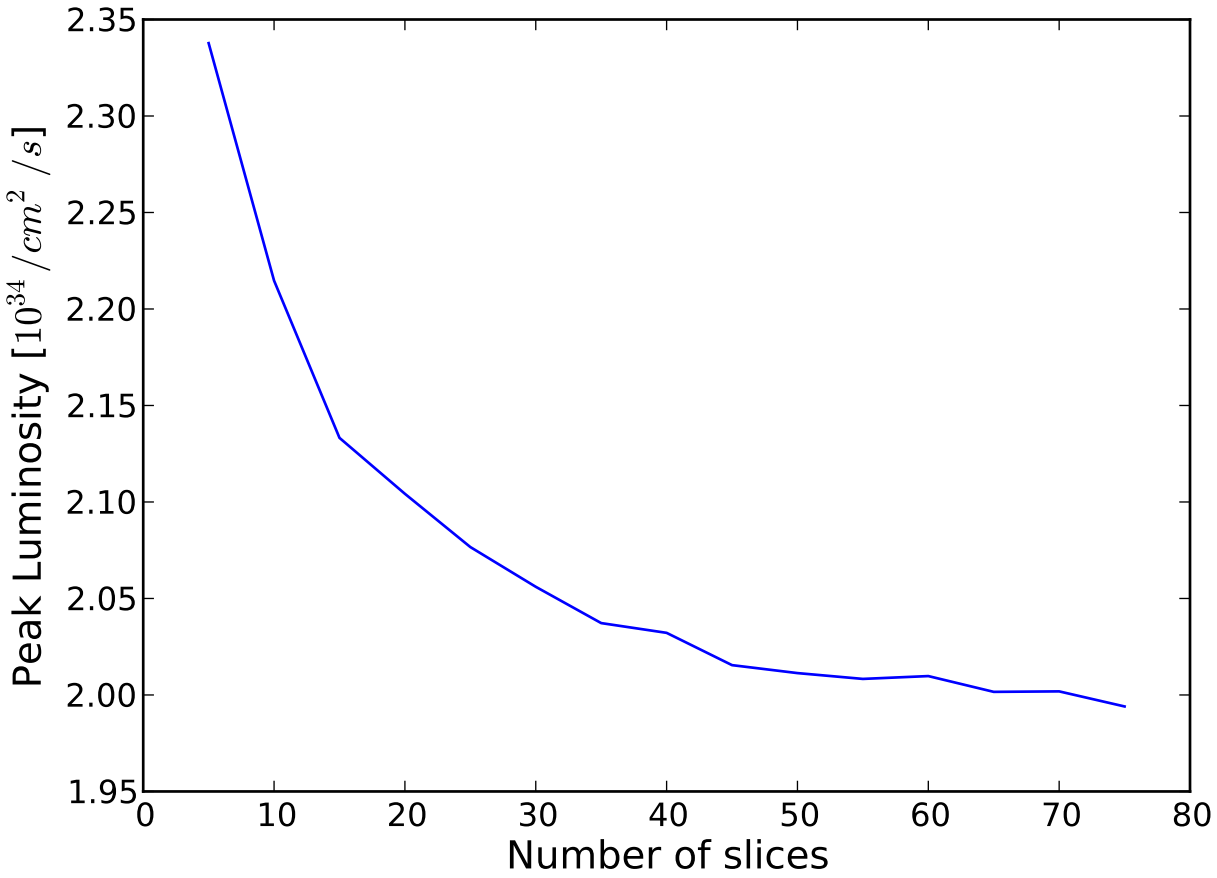

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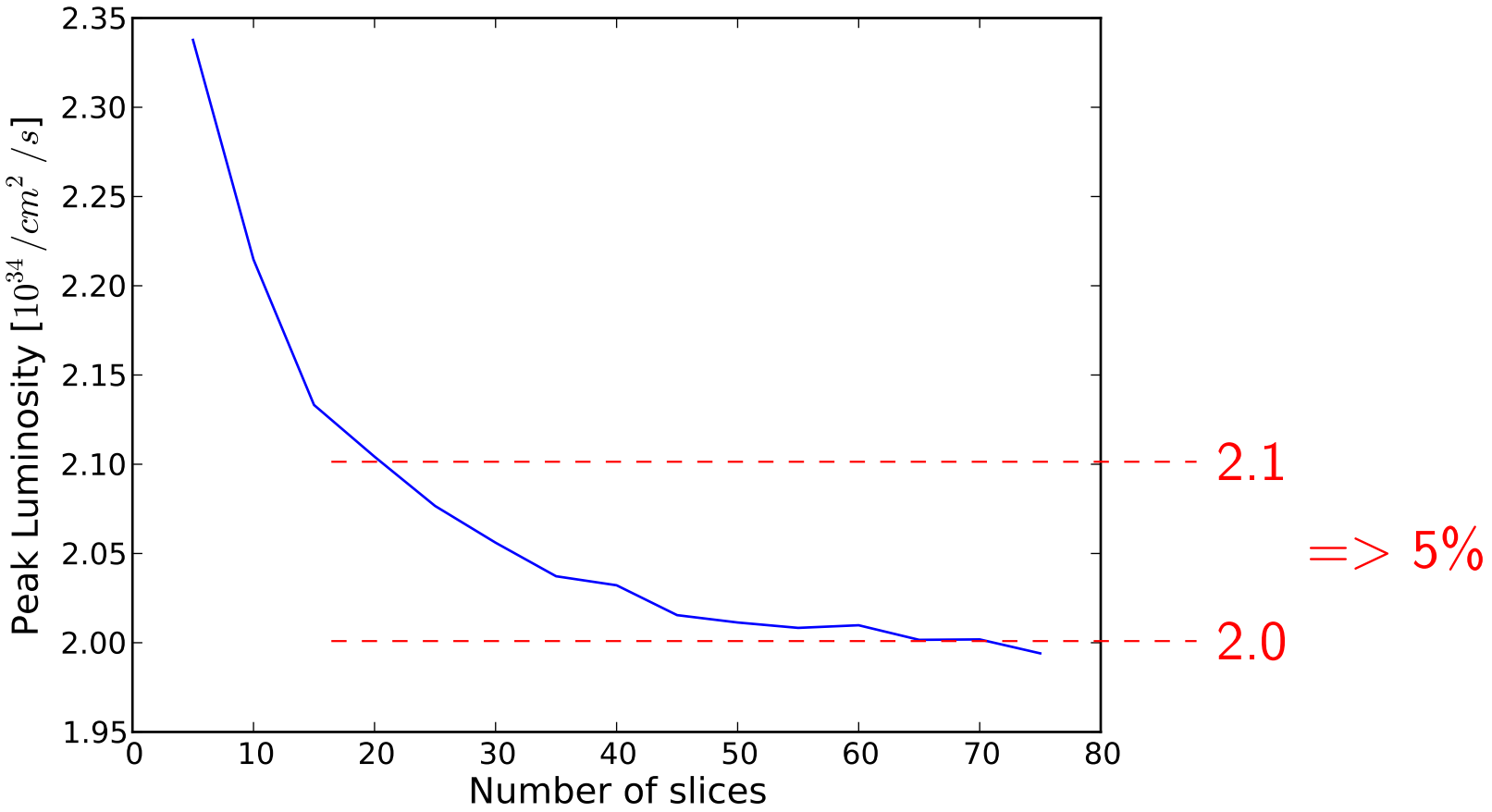

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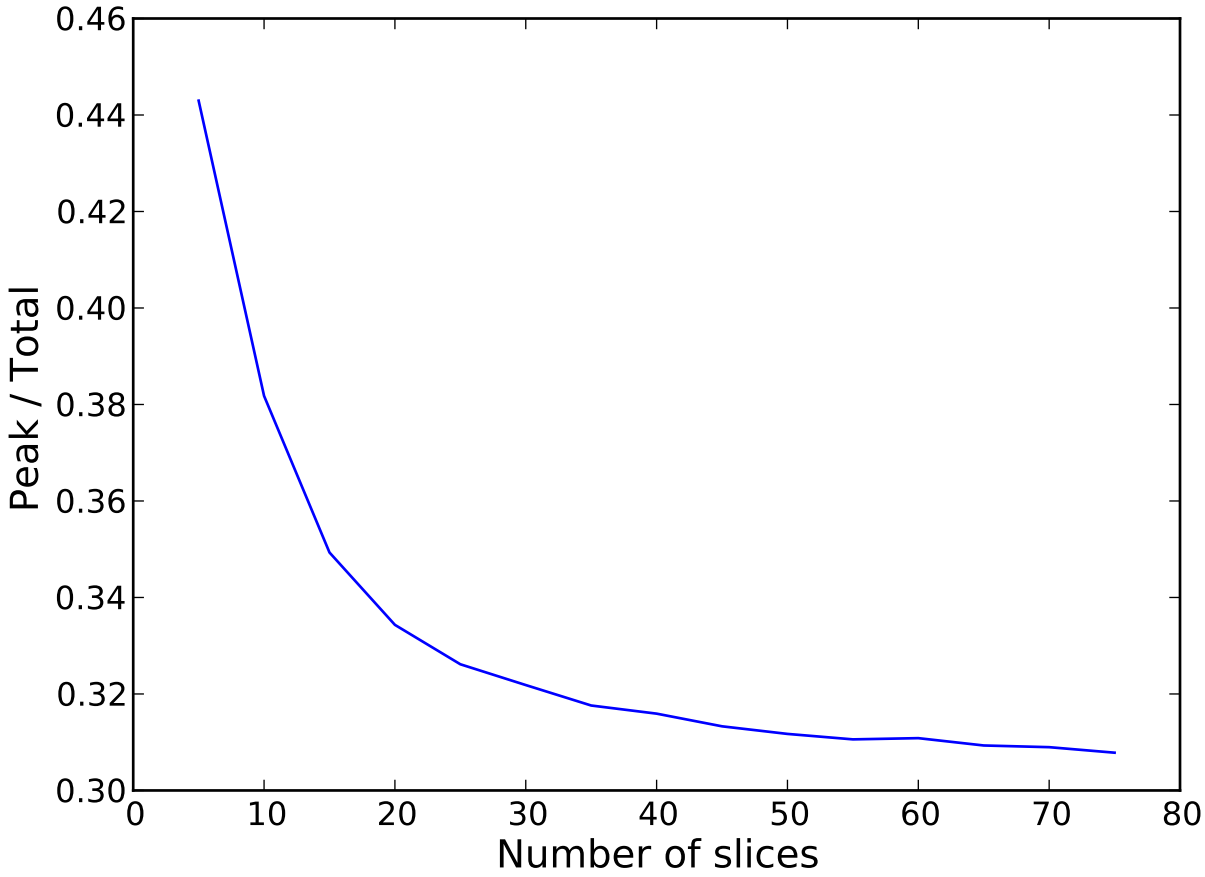

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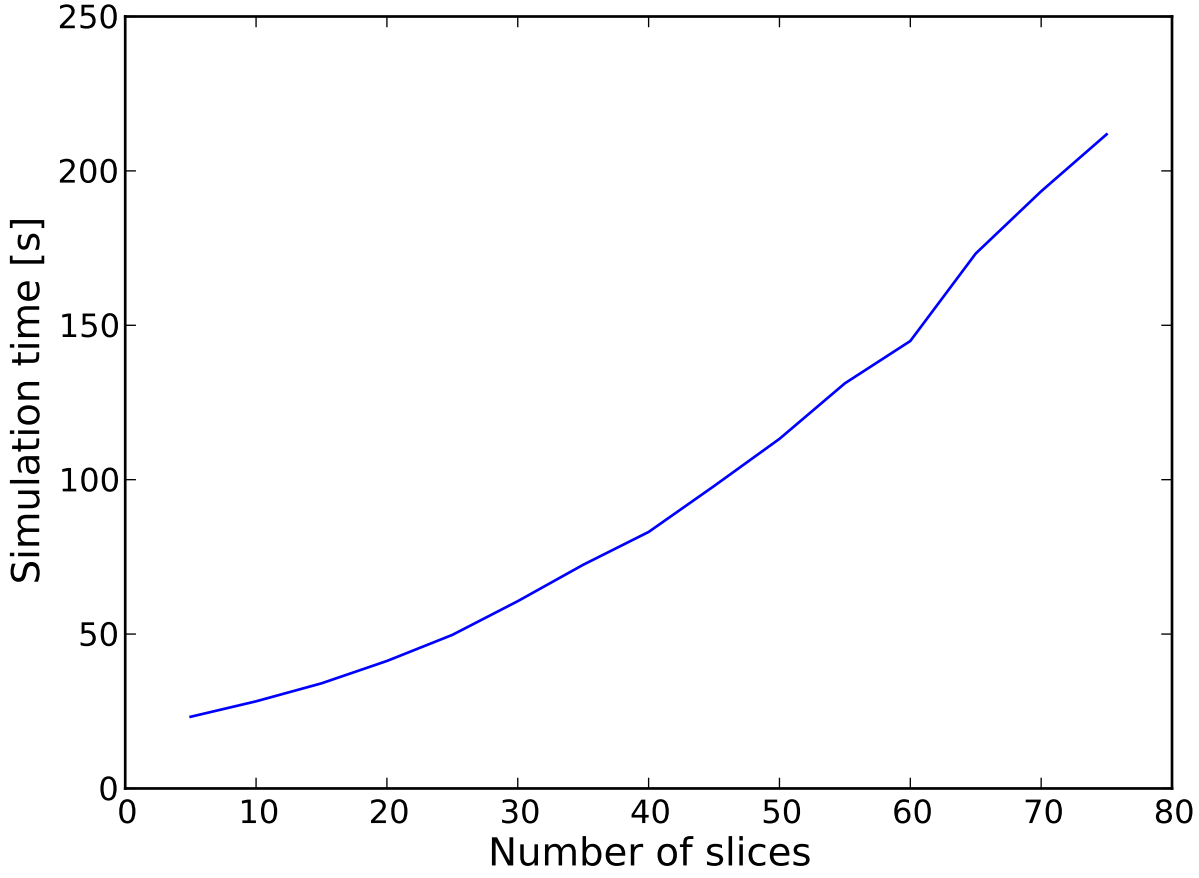

Summary

- IR Tracking code well on the way.
- Potential issue with GUINEA-PIG slicing observed, to be checked by experts (Daniel and/or Barbara, thanks in advance for helping!)