Theia Status Update and Tutorial

Optics Group, Virgo

Wednesday, June 28th 2017

Reminder

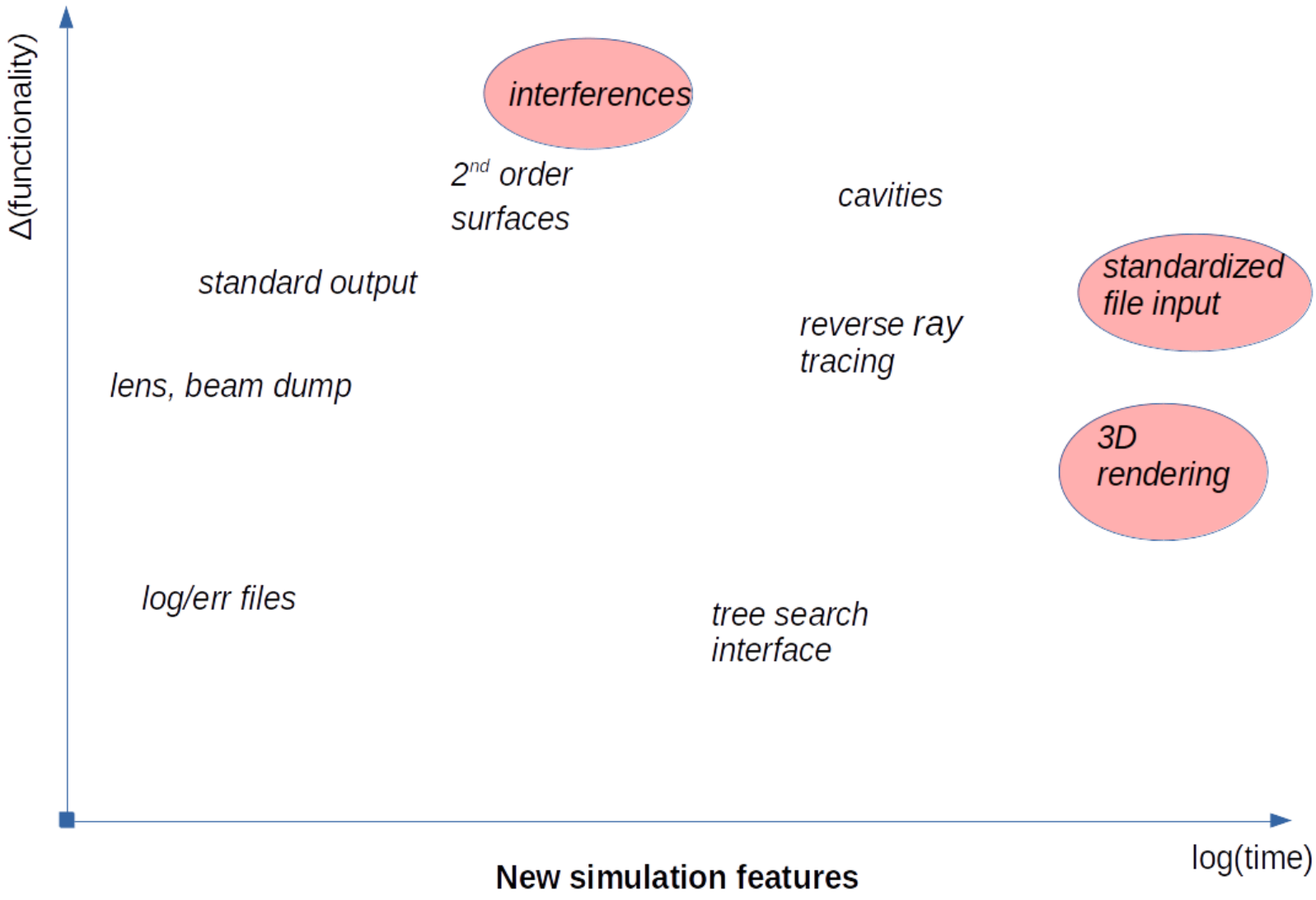
`theia`:

- General astigmatic beam tracer in 3D
- With support for many optical components(mirrors, thin lenses, thick lenses, beamdumps)
- And many Gaussian functions
- Reading and writing standard input (`.tia`) and output (`.out`) text files
- And with 3D visualization capabilities by exporting to CAD software
- Geometric optics: no approximation
- Soon: cavities, interferences

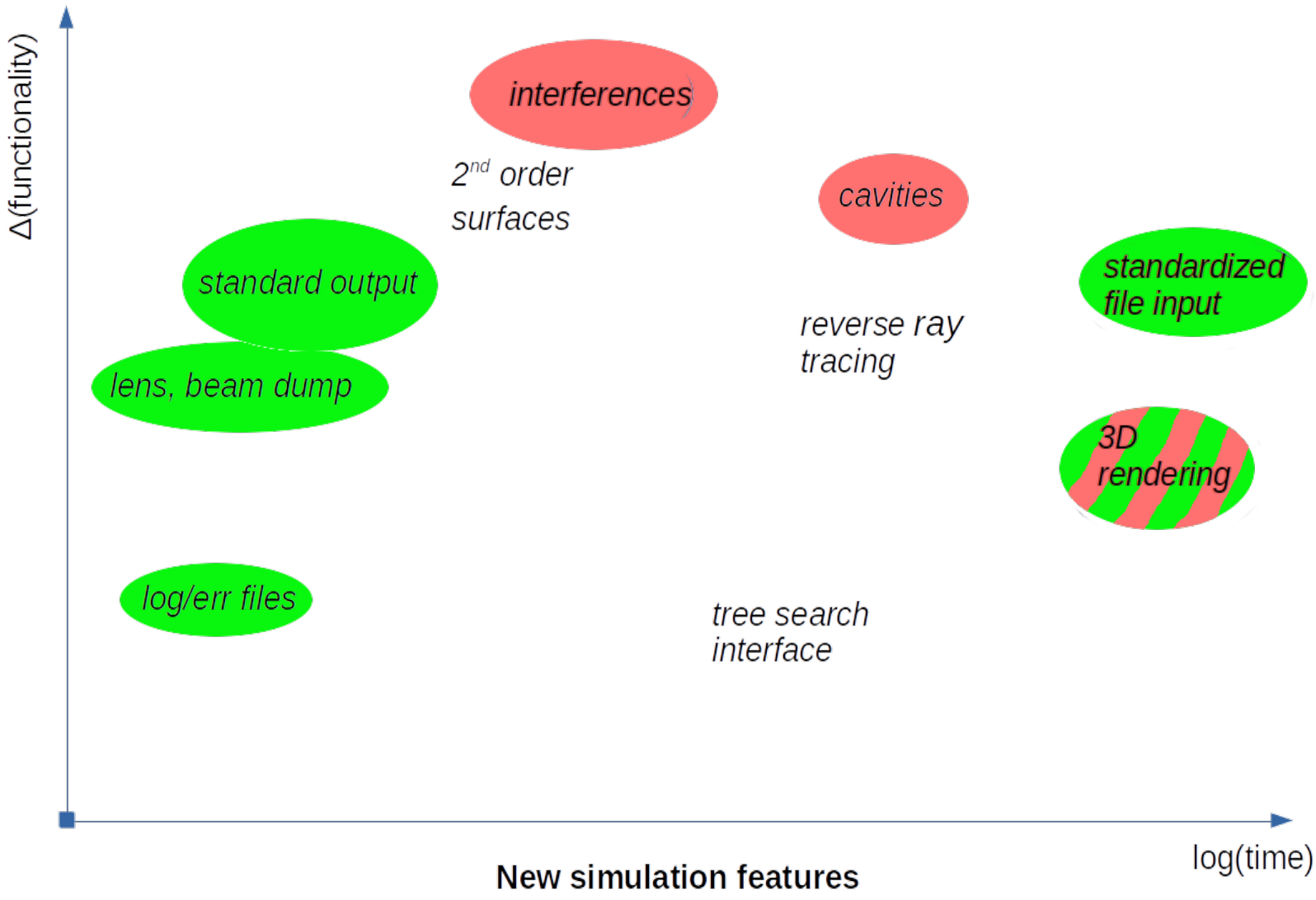
News

- June 9th: `theia 0.1.0`
- Idea: Virgo Hub on `hub.virgo-gw.eu` for home-made software (`theia`, `BruCo`, etc.) ? $\rightarrow$ Question pending...
- In the mean time: sources, documentation, news on `http://theia.hopto.org:56000`
- And: Internship presentation (July 7th), Virgo Week ($\sim$July 15th)

Before (May 10th) ...



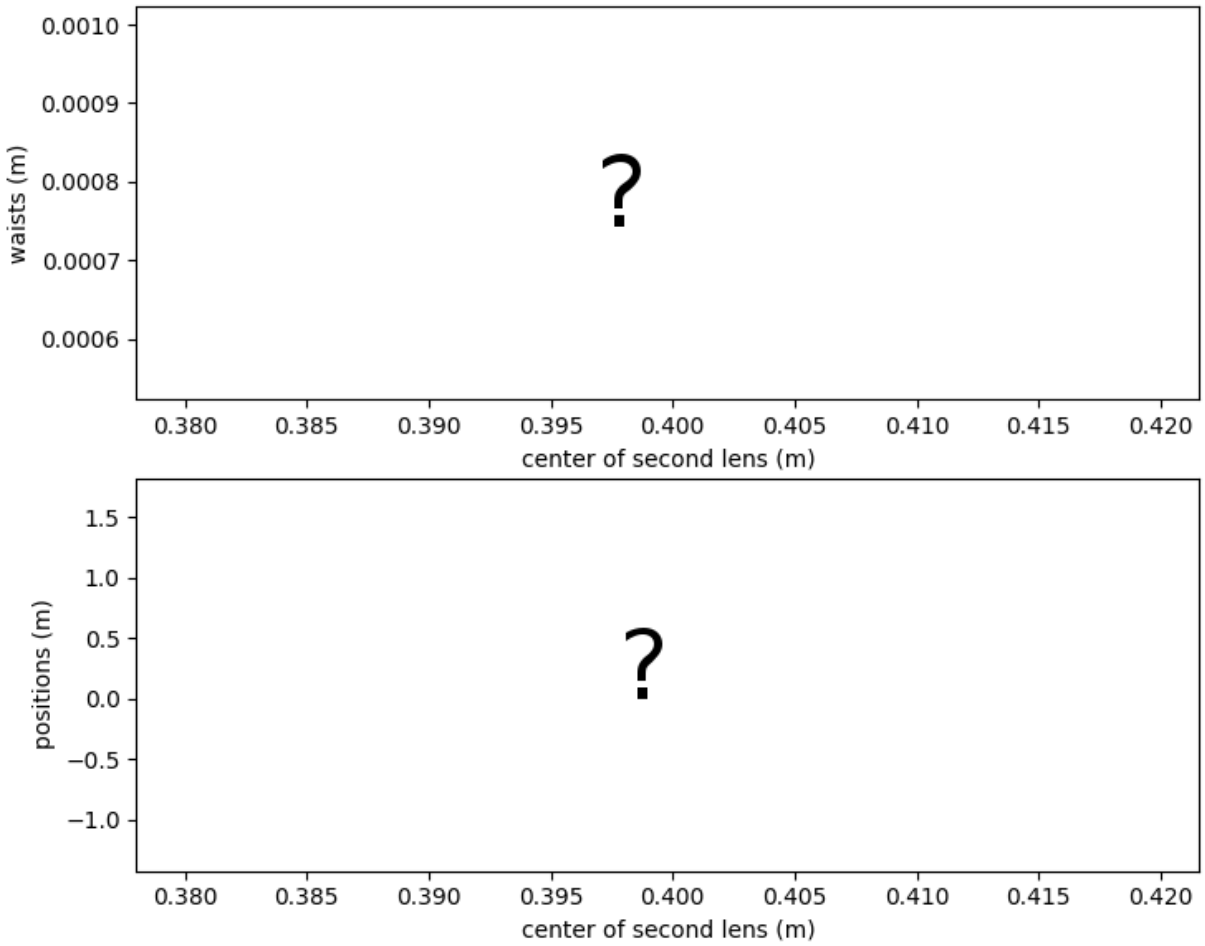
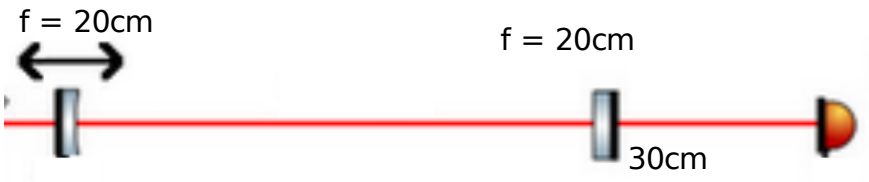
... After (June 28th)



Quick Tour

`http://theia.hopto.org:56000`

Tutorial: CLI tool

- `theia` CLI tool
- `theia` as a library

Tutorial: Library tool