

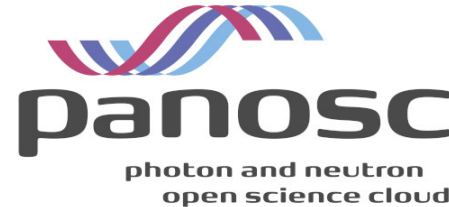
# CERIC-ERIC Panosc WP5 update

2020 Development sprint, 20. 4. - 30. 4.

Aljoša Hafner

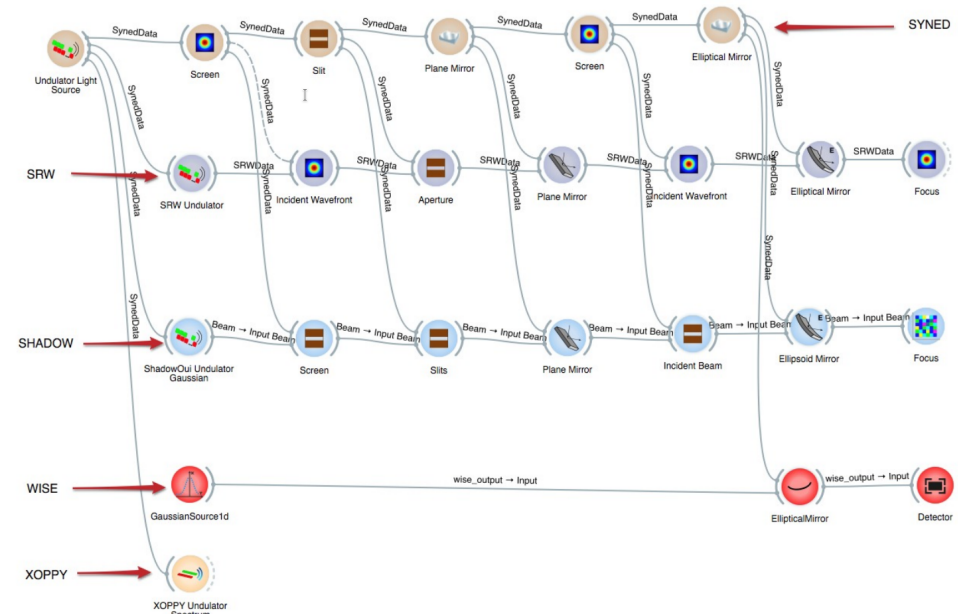
**CERIC**

Central European  
Research Infrastructure  
Consortium



# OASYS

- Widely used software package for X-ray optics simulations (Created by L. Rebuffi and M. Sanchez del Rio)
- Codes available: Shadow, SRW, XOPPY, Syned
- Maintaining and developing code



# Wiser in OASYS

Raimondi, L., and D. Spiga. *Mirrors for X-Ray Telescopes: Fresnel Diffraction-Based Computation of Point Spread Functions from Metrology*. *Astronomy & Astrophysics* 573 (Jan 2015): A22. <https://doi.org/10.1051/0004-6361/201424907>.

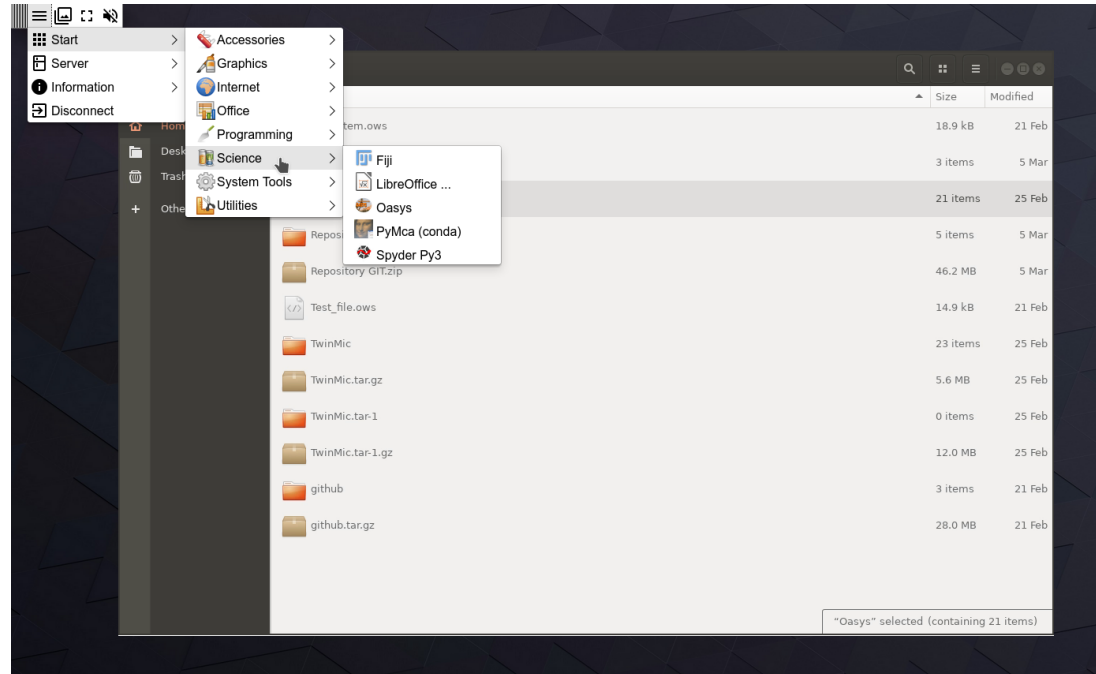
- Port of numerical integration code (Huygens-Fresnel integral)
- Hierarchy:
  - LibWiser
  - WofryWiser
  - OasysWiser

The screenshot shows the GitHub repository page for `oasys-elettra-kit / OasysWiser`. The repository has 2 watchers, 0 stars, and 1 fork. It includes tabs for Code, Issues (7), Pull requests (0), Actions, Projects (1), Wiki, Security, Insights, and Settings. A message states "No description, website, or topics provided." Below this, statistics show 5 commits, 1 branch, 0 packages, 0 releases, and 2 contributors under the MIT license. A table of recent commits is visible, with the latest commit by `aljosahafner` 9 days ago. The file list includes `orangecontrib`, `LICENSE`, `MANIFEST.in`, `README.md`, `README.txt`, and `setup.py`. The `README.md` file is selected, showing the title "Wiser for OASYS".

File	Description	Time
<code>orangecontrib</code>	Major change, complete rewiring to Lib- and Wofry- Wiser, working wit...	9 days ago
<code>LICENSE</code>	Initial commit from Aljosa fork	13 days ago
<code>MANIFEST.in</code>	Initial commit from Aljosa fork	13 days ago
<code>README.md</code>	Initial commit from Aljosa fork	13 days ago
<code>README.txt</code>	Initial commit from Aljosa fork	13 days ago
<code>setup.py</code>	Major change, complete rewiring to Lib- and Wofry- Wiser, working wit...	9 days ago

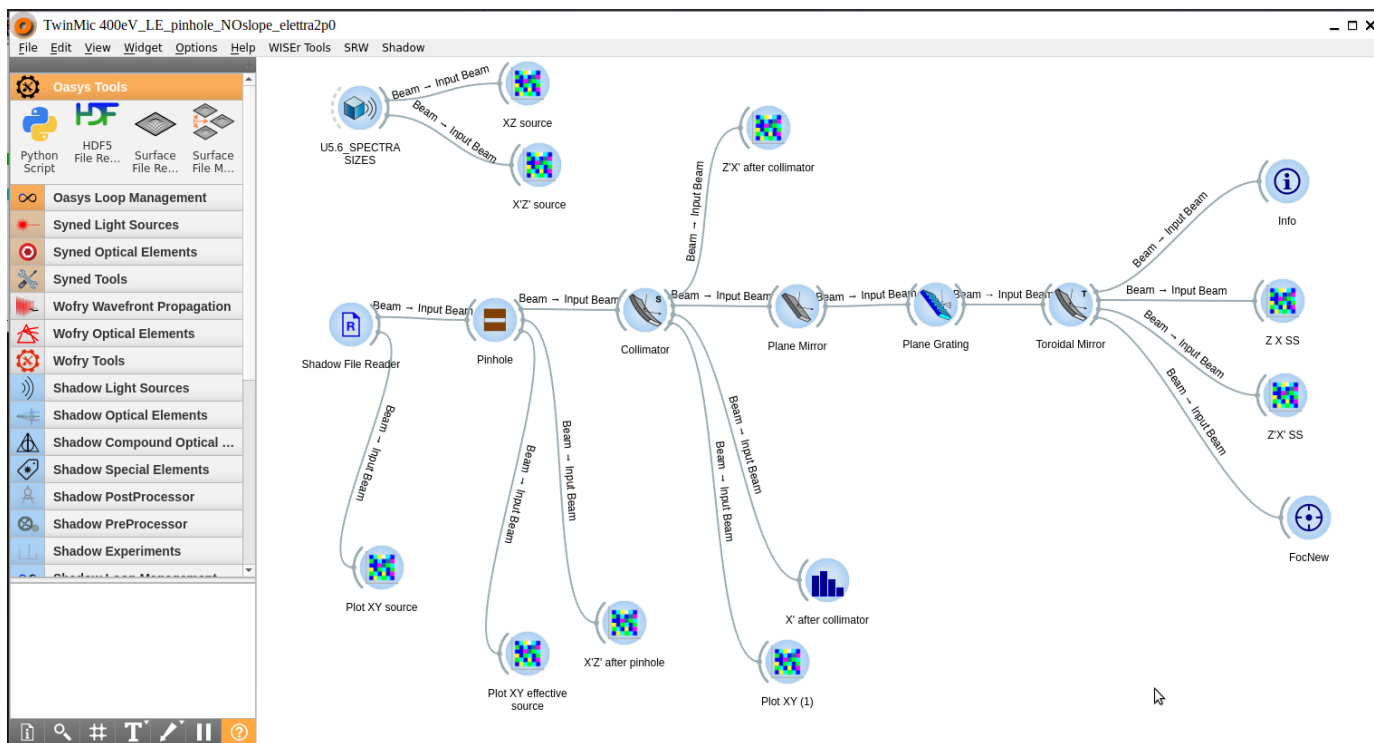
# Remote access

- RAFEC – internally developed remote access technology built around Xpra and Kubernetes
- To be available through VUO
- Collaborative access



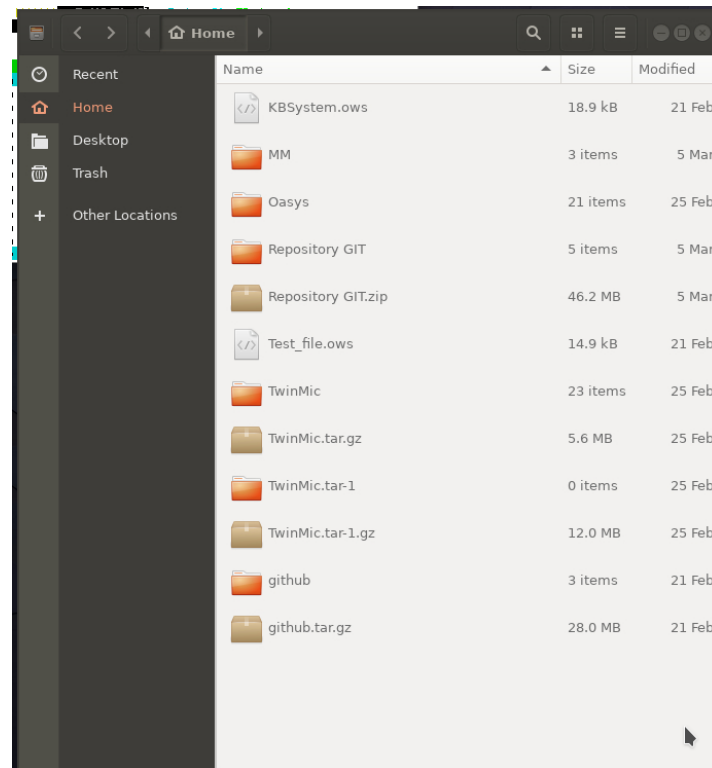
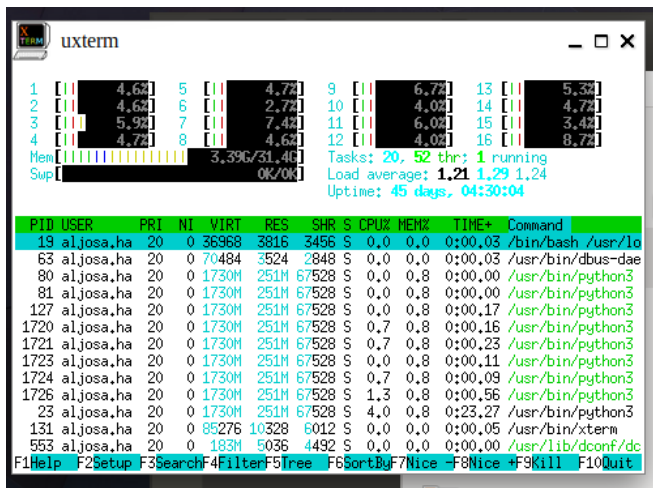
# Documented beamlines

- Elettra beamlines



# Cloud resources

- Scaling with available computing power
- Each user has access to their own files



# Outlook

- Wiser in OASYS
  - Full-range of optical elements
  - Interoperability with other OASYS codes
- OASYS in RAFEC
  - Documented beamlines, accessible to scientists and users
  - Interoperability with other software (goal of this workshop)
- Strengthening OASYS community