
ESRF
The European Synchrotron

Beamline Simulation
Exercises in OASYS

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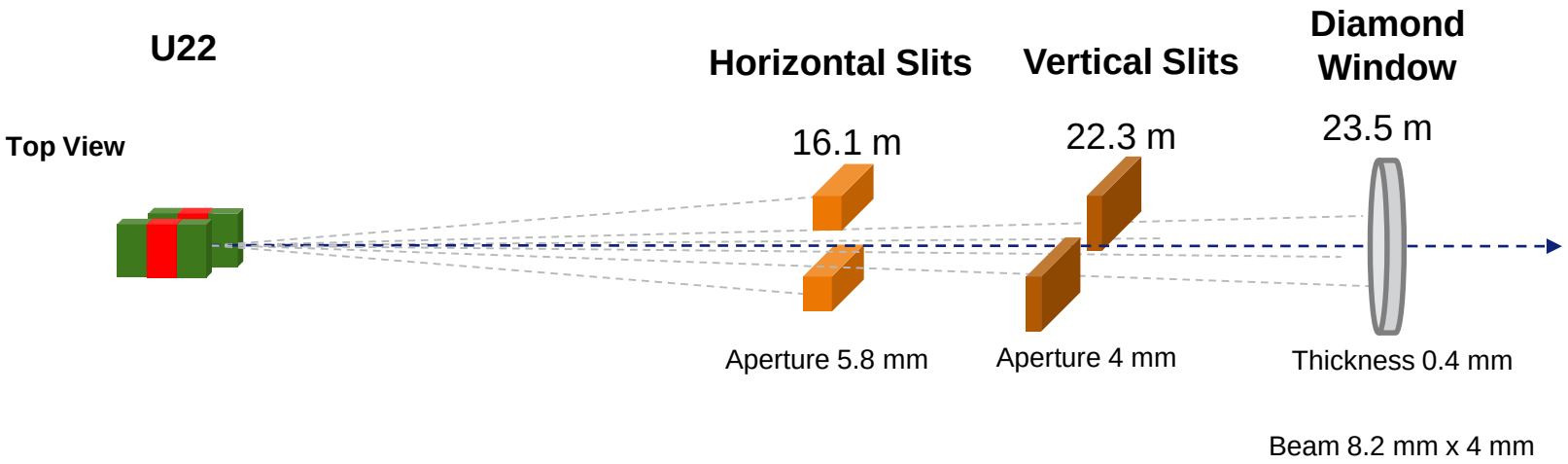
INSERTION DEVICES SPECTRA SIMULATIONS

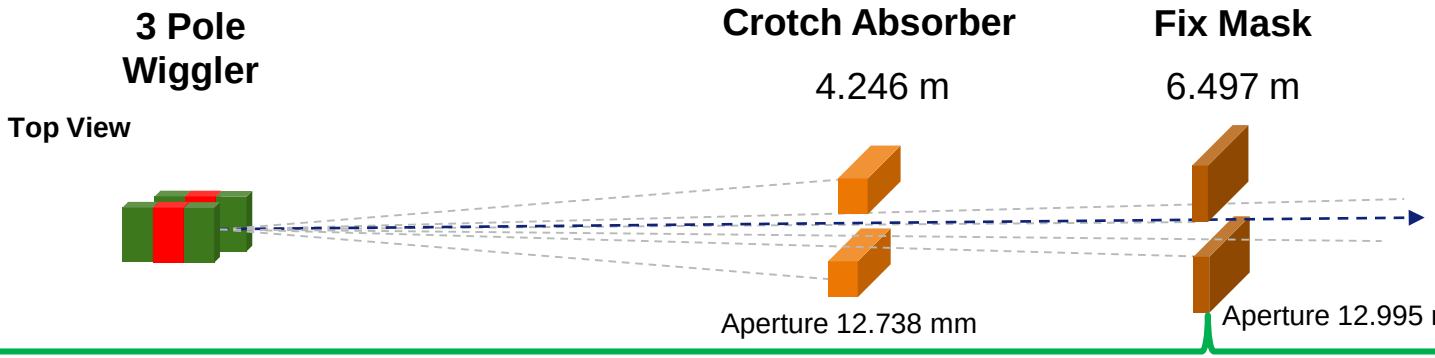
- Learn to simulate the different synchrotron sources with Oasys.
- Tuning curves
- Power density

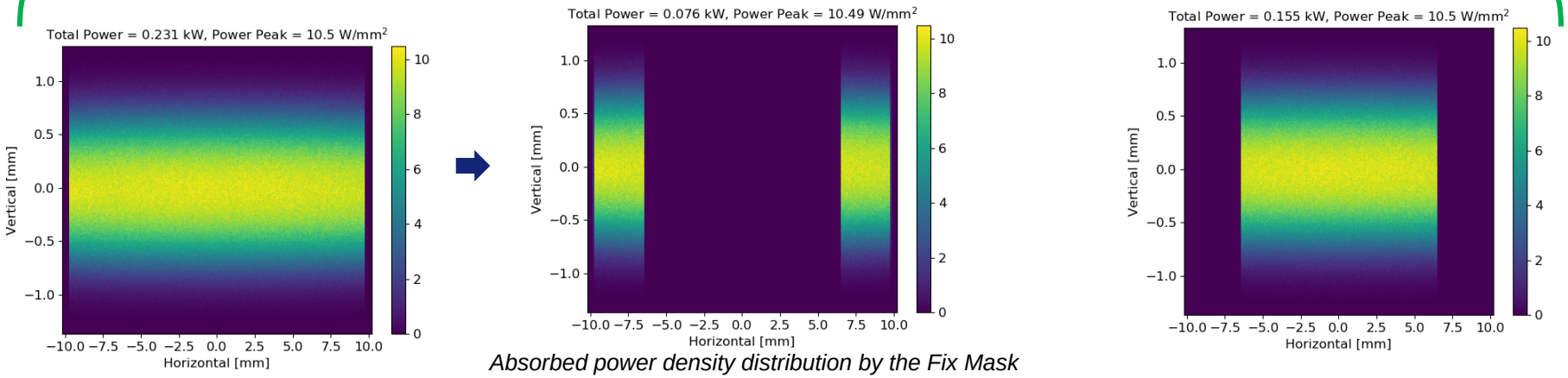
HEAT LOAD IN COMPONENTS



Element	Total arrival power [W]	Total power Absorbed on element [W]
Diamond Window		

HEAT LOAD IN COMPONENTS





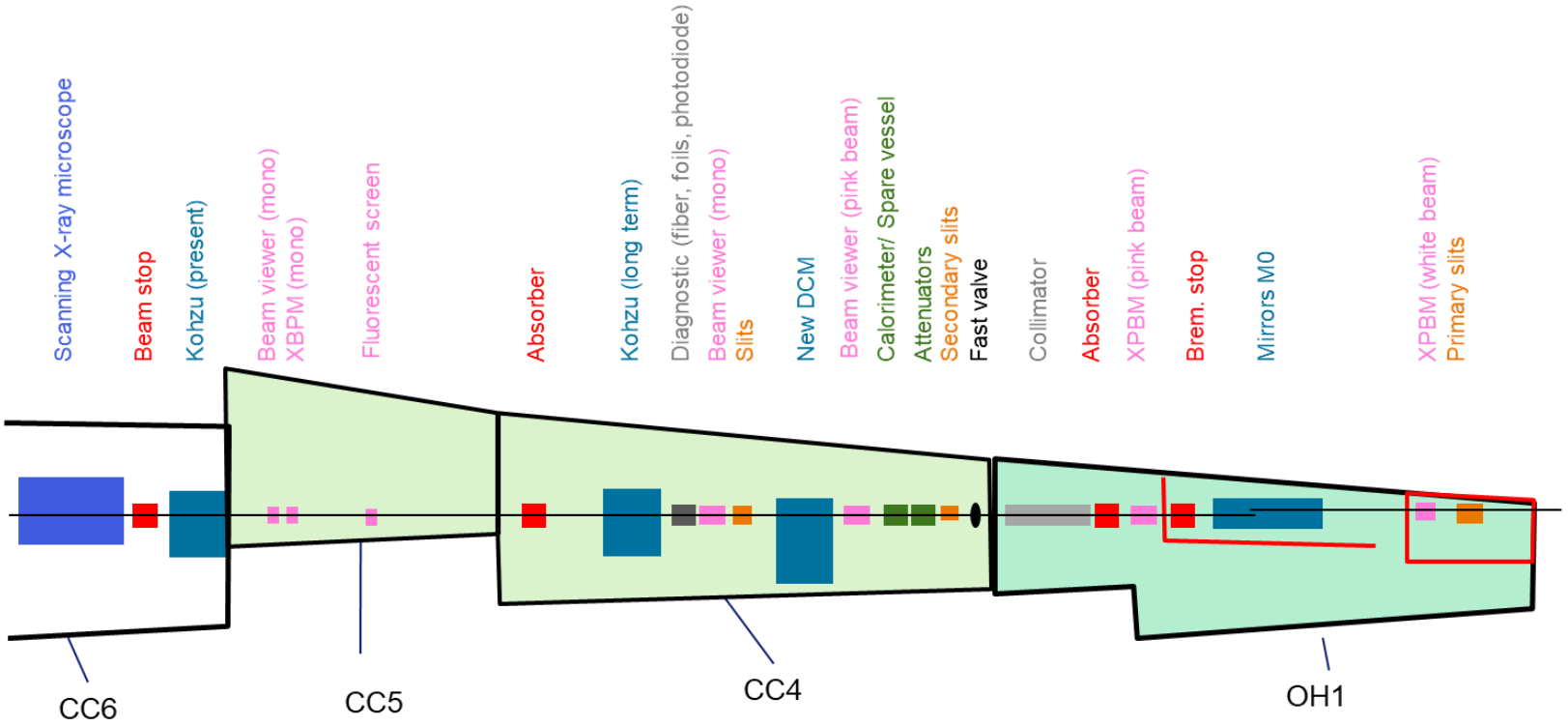
Absorbed power density distribution by the Fix Mask

Element	Total arrival power [W]	Total power Absorbed on element [W]	Power peak on element [W/mm²]	Total transmitted power [W]
Fix Mask	231	76	10.49	155

RAY TRACING SIMULATIONS

- Learn to build a model with ShadowOui
- Source
- Slits
- Mirrors
- Crystals

SKETCH OF THE BEAMLINE



SKETCH OF OPTICS LAYOUT