

# Correction of the semitransparent beamstop for ptychographical measurements at EH2.

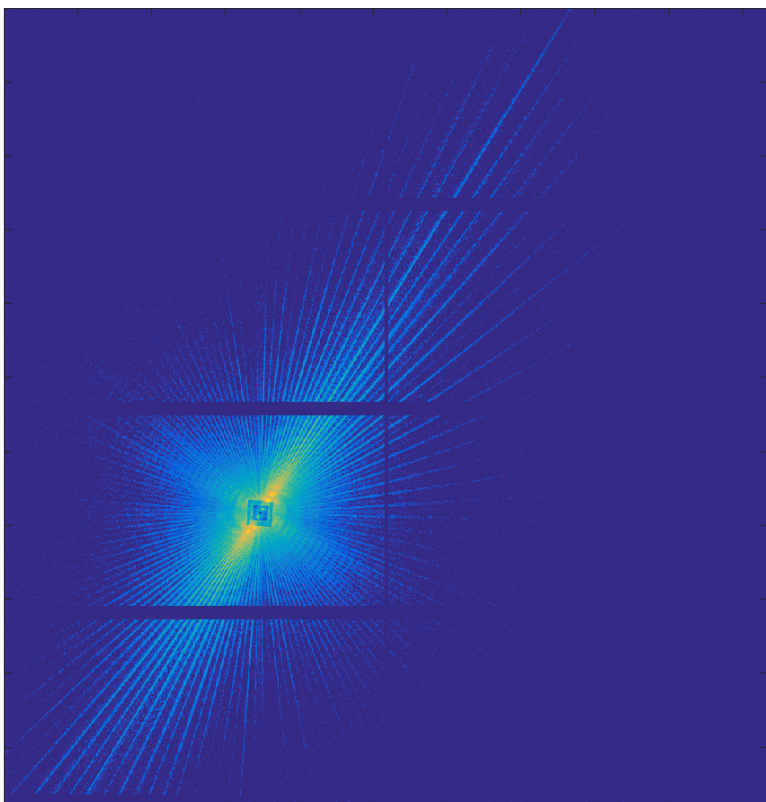
The structure of the beamstop:

- 5x5 mm film of Si: 250 m
- 3x3 mm film of Si over the previous one: 300 m
- 0.5 mm circle piece of Ta: 500 m

In case of 8 keV photon energy the corresponding scaling factors have to be applied to each film:

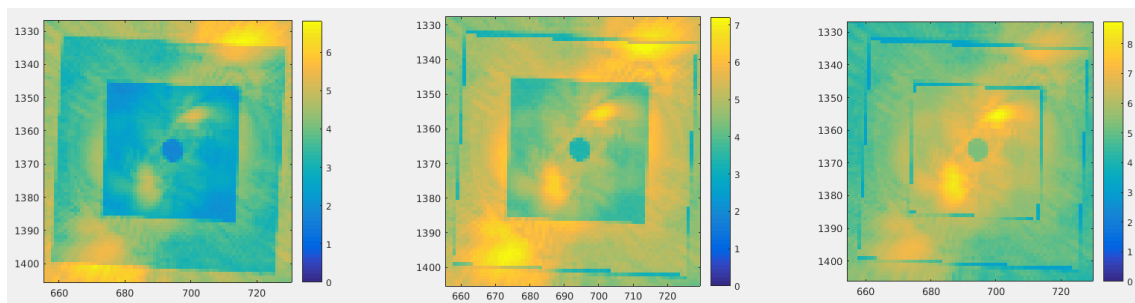
- 36.26
- 74.38 (2696.87 for stack)

The example of Siemens Star diffraction pattern in log- scale with a semitransparent beamstop:



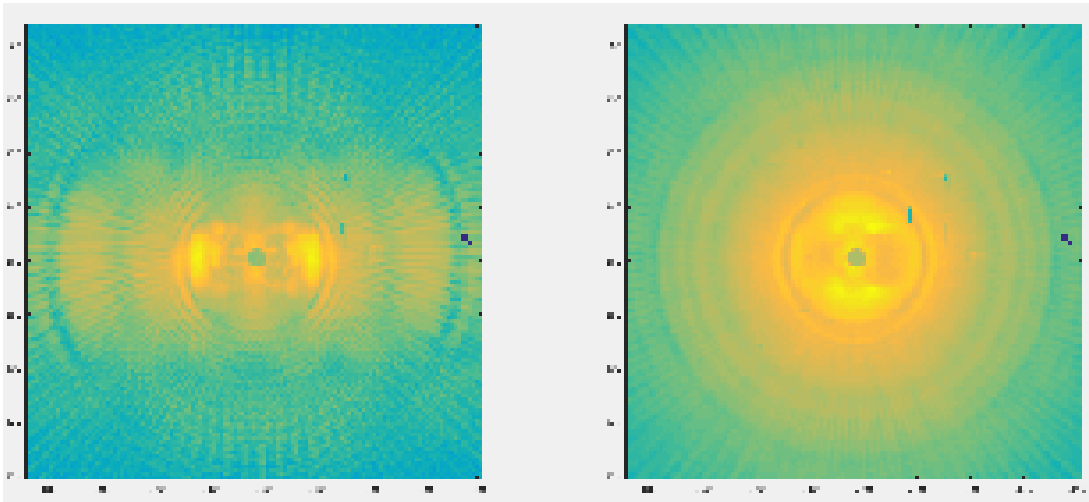
After the setup of the beamstop during the experiment a test image should be taken.

Two regions of outer and inner beamstop are selected ones and correction coefficients are applied:



The regions of lines are selected by 8 points manually selected.

The result of automated interpolation looks as follows:



Since the coefficients are not known precisely, a PSD fitting can be performed.