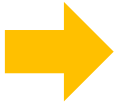
virtual STEM imaging for 4D-STEM data

Requirements: Python-integrated GMS 3, Numpy, Scipy, Matplotlib

- dimensions of 4D-STEM data = (sx, sy, dsx, dsy)
- sx, sy → STEM scanning size
- dsx, dsy → diffraction pattern size

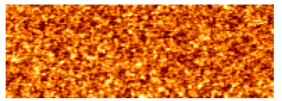
4D-STEM data (sx, sy, dsx, dsy)

[4D-STEM]_virtual_annular_detector.py

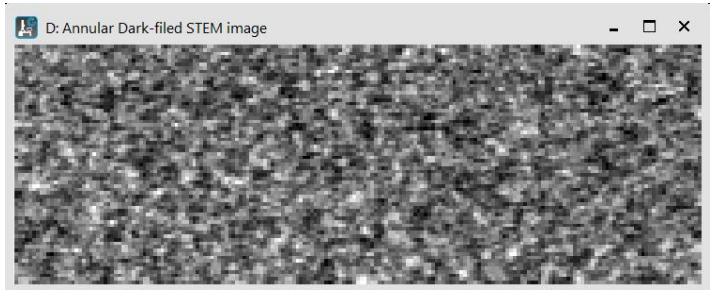


detector

PACBED + detector



ADF-STEM image (Python figure)



ADF-STEM image (GMS)

when a detector angle range is specified by the user

- the center position will be calculated or can be specified by the user
- a certain collection angle range can be determined by the user

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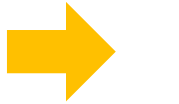
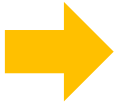
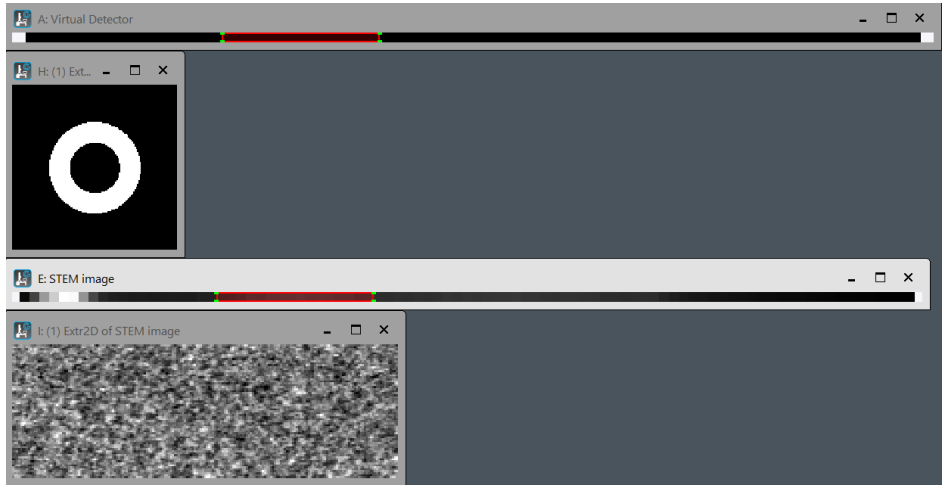
4D-STEM data (sx, sy, dsx, dsy)



[4D-STEM]_virtual_annular_detector.py





interactive annular detector

- the center position will be calculated or can be specified by the user
- a certain collection angle range can be determined by the user