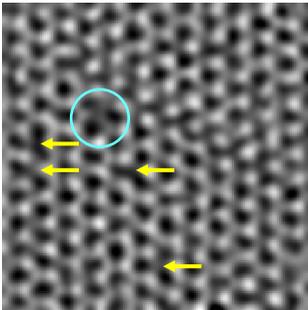




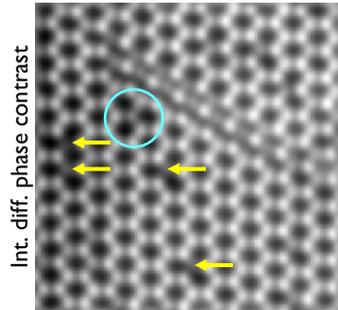
## New Capabilities!

### Atomic Resolution SE and 4D Imaging

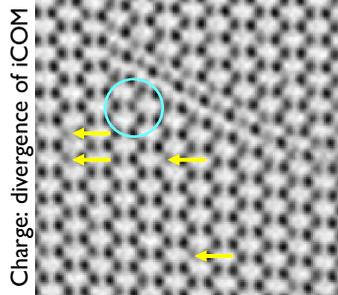
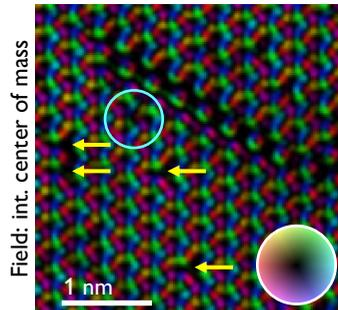
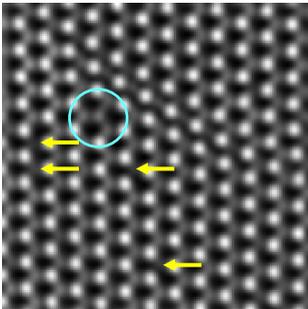
Secondary Electron Detection



Fast 4D-STEM (67k diff. patt./s)



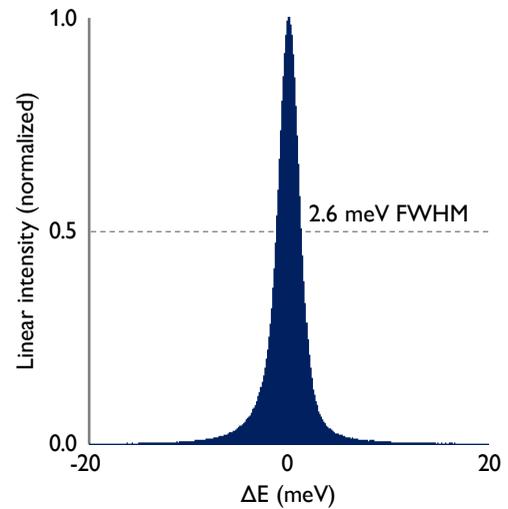
MAADF



- V substitution
- S vacancies (not all marked)

MoS<sub>2</sub> monolayer with defects: Nion HERMES at 60 kV with DECTRIS ARINA detector.

### Sub-3 meV Resolution Vibrational EELS



Zero loss peak: Nion HERMES at 20 kV with Nion IRIS EELS, 1000 spectra of 3 ms, aligned.

