

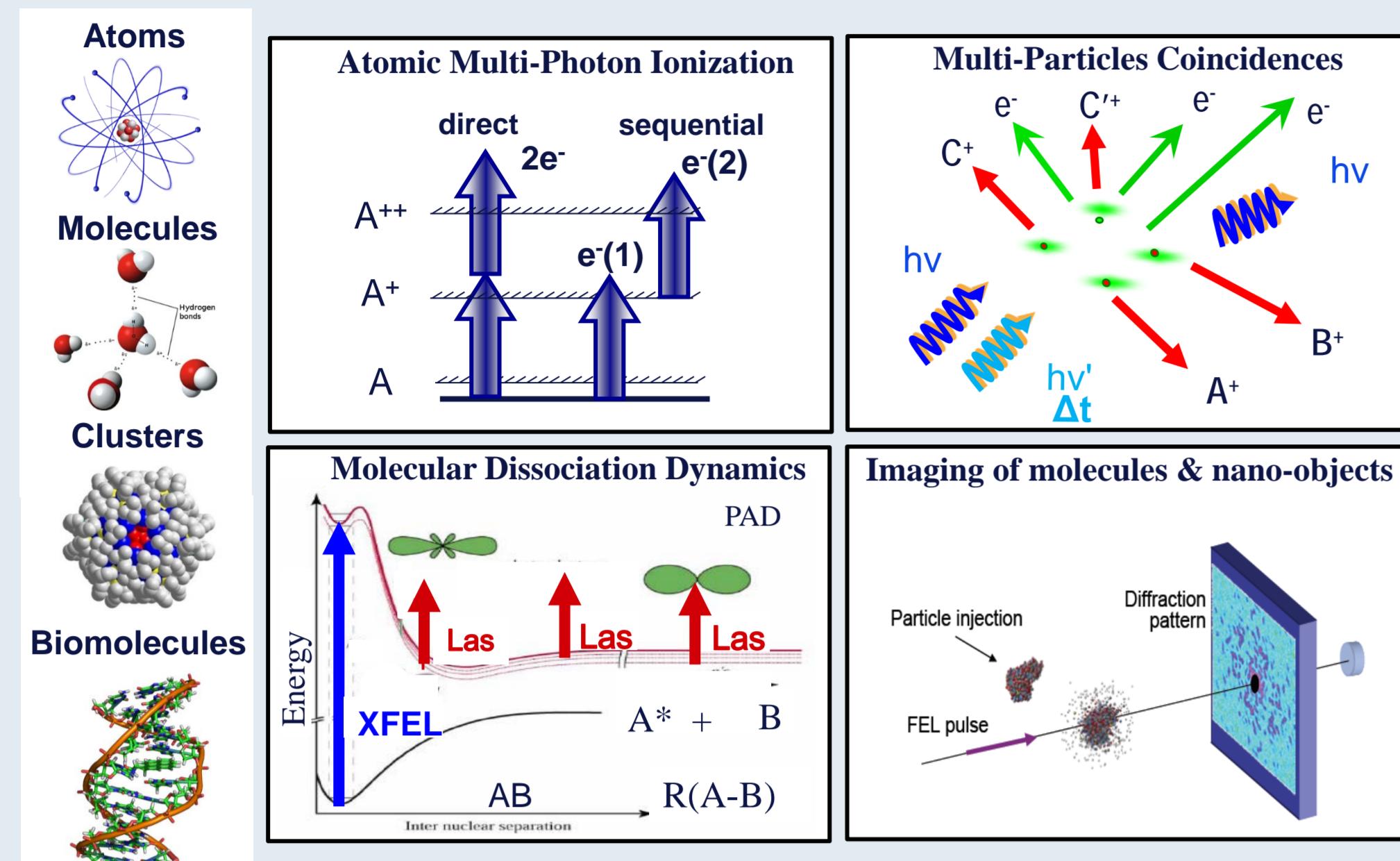
The Small Quantum Systems - SQS Instrument at the European X-Ray Free Electron Laser

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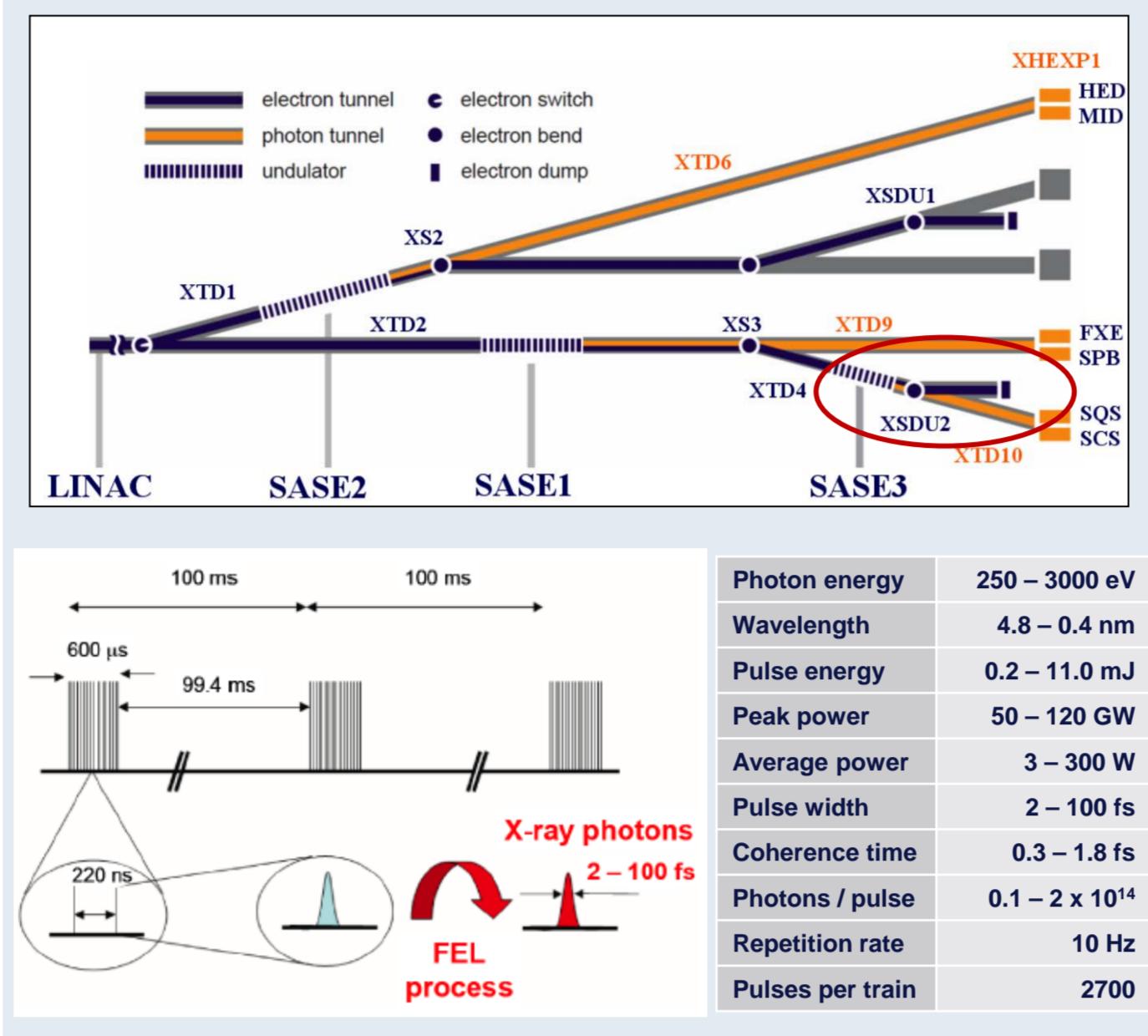
European XFEL GmbH, Holzkoppel 4, 22869 Schenefeld, Germany



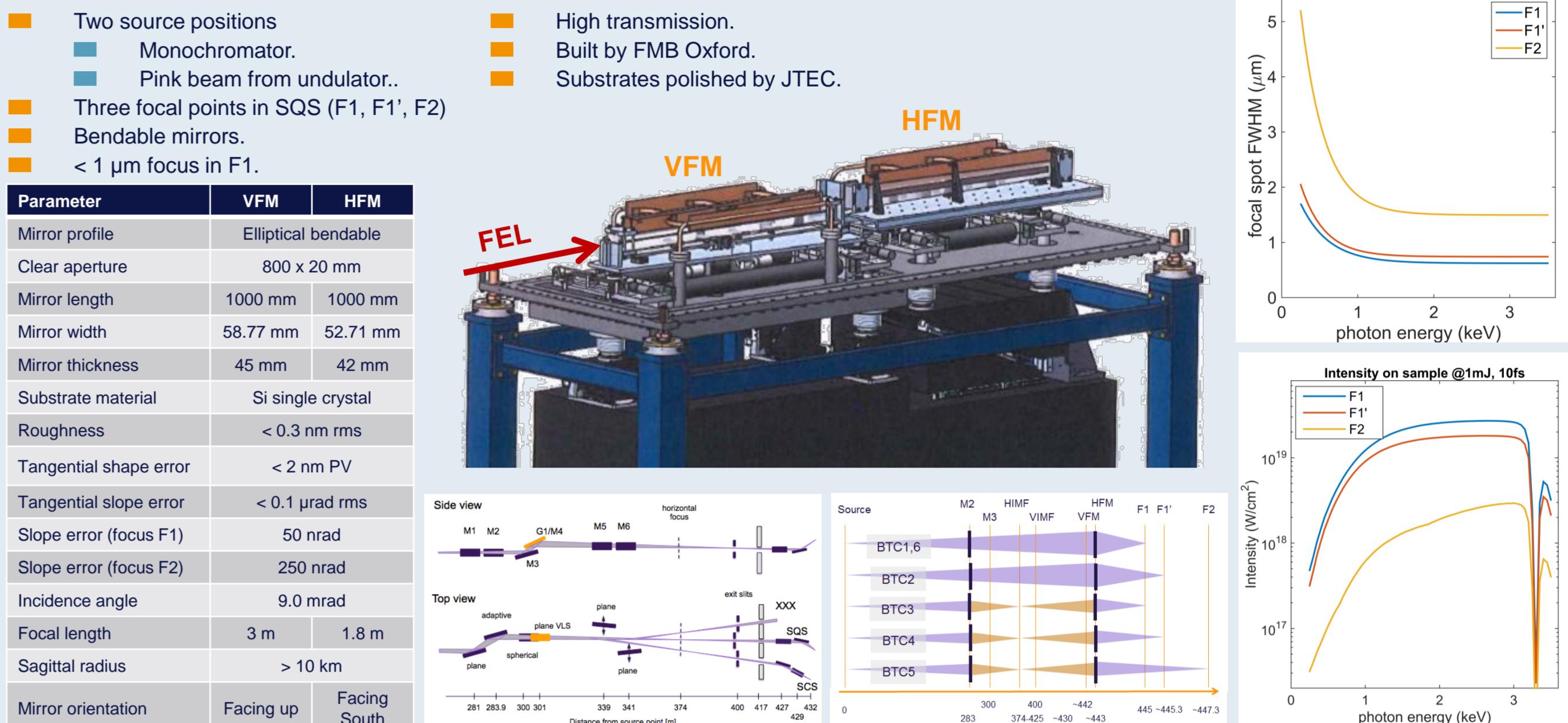
Scientific Scope: Small Quantum Systems (SQS)



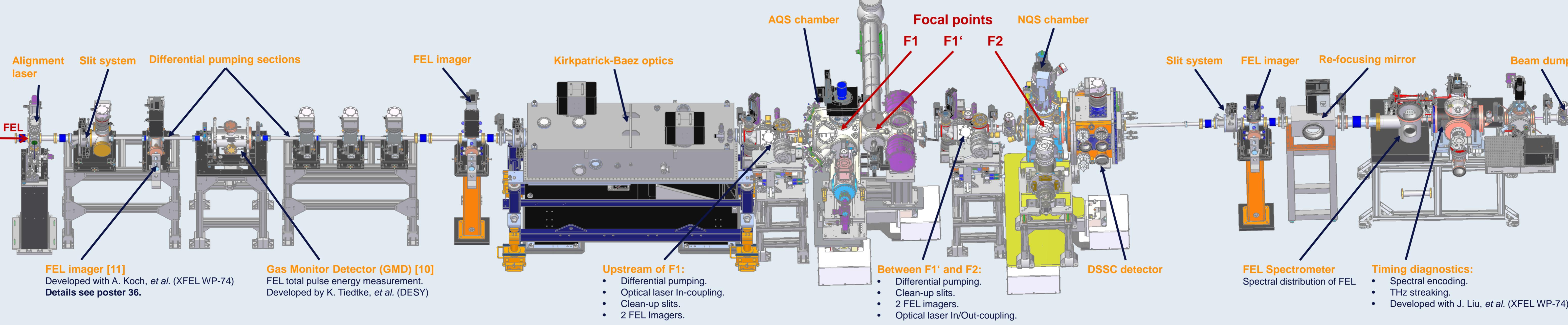
SASE3 Soft X-Ray Beamline



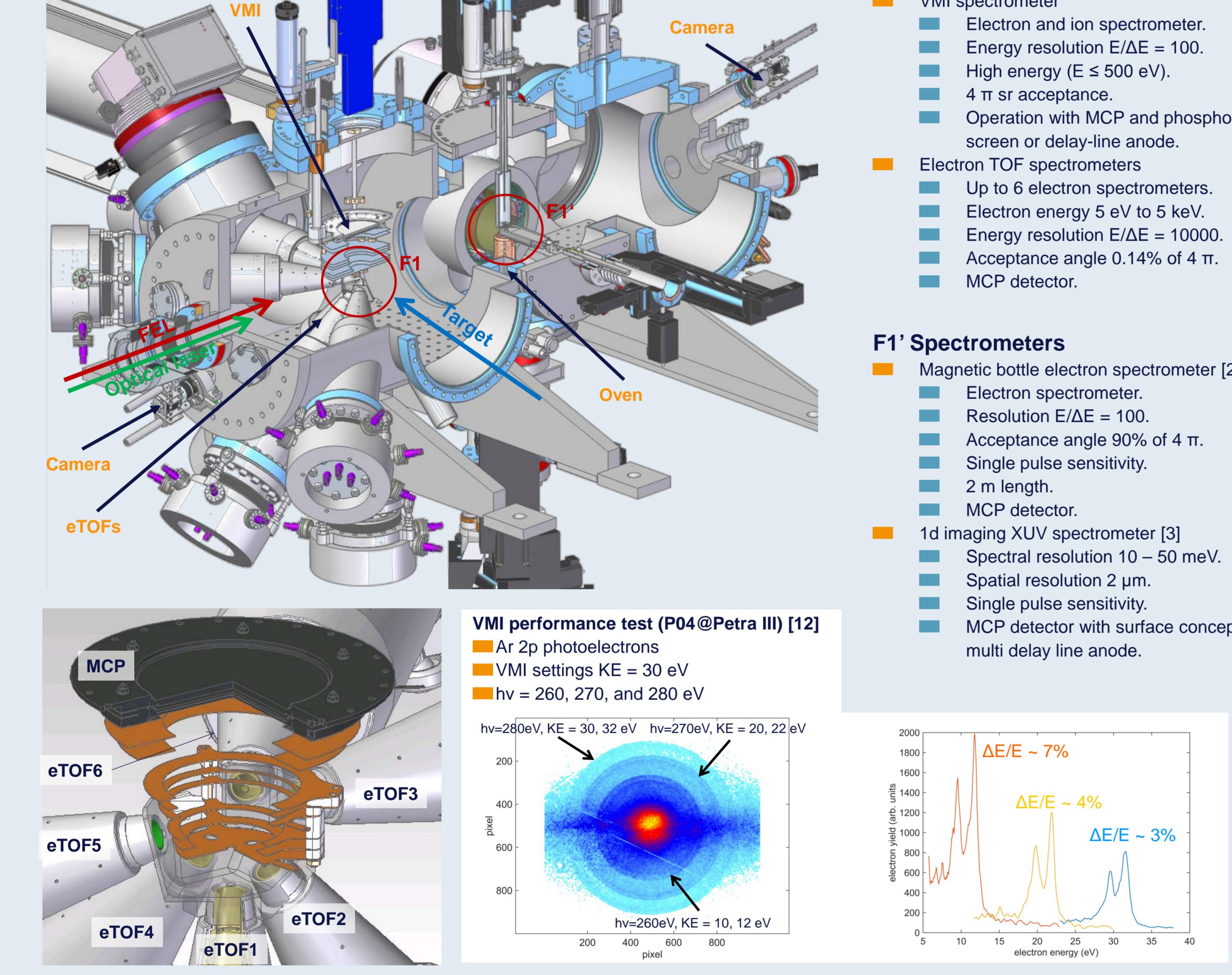
Beam Transport and KB mirrors



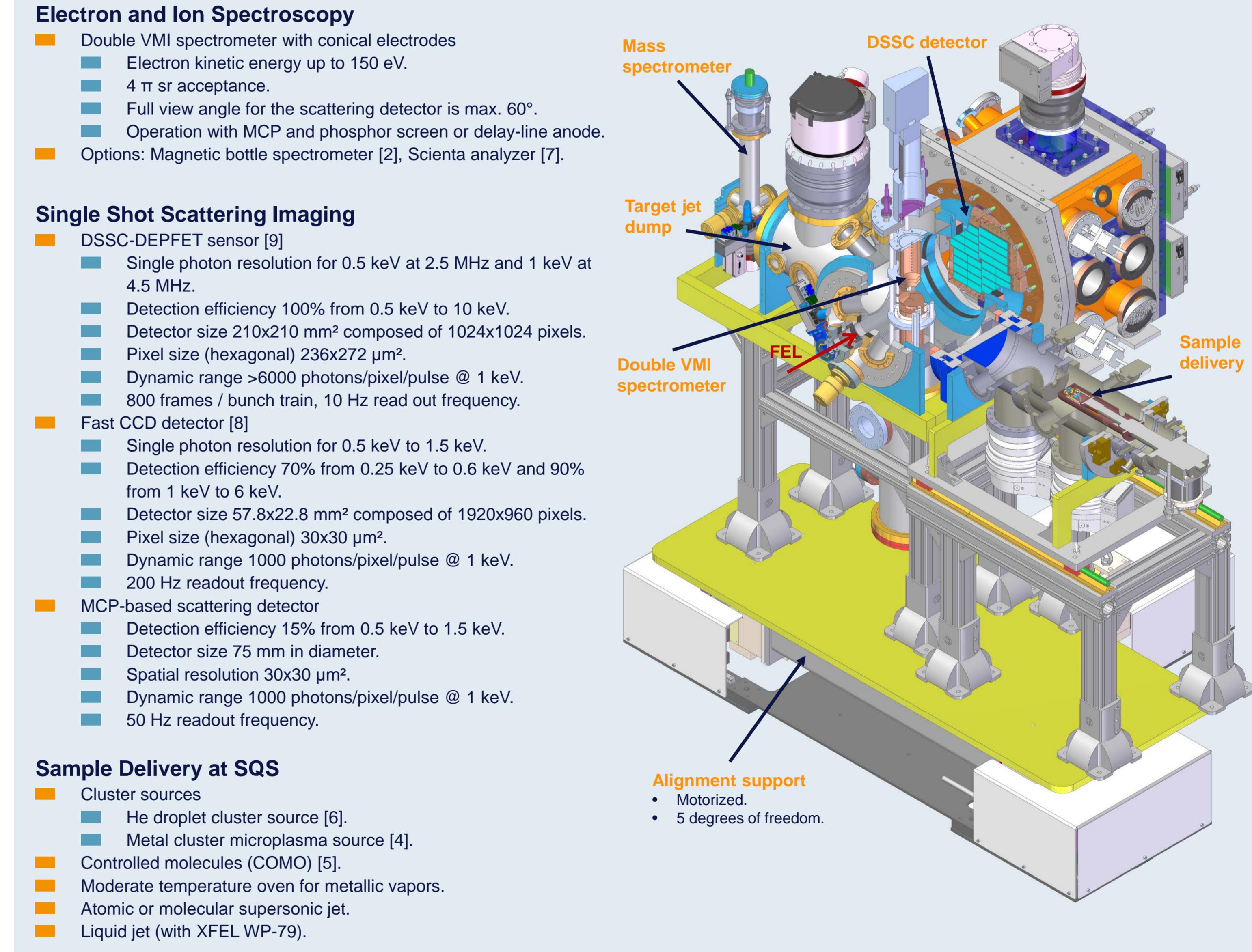
Overview of the SQS Instrument



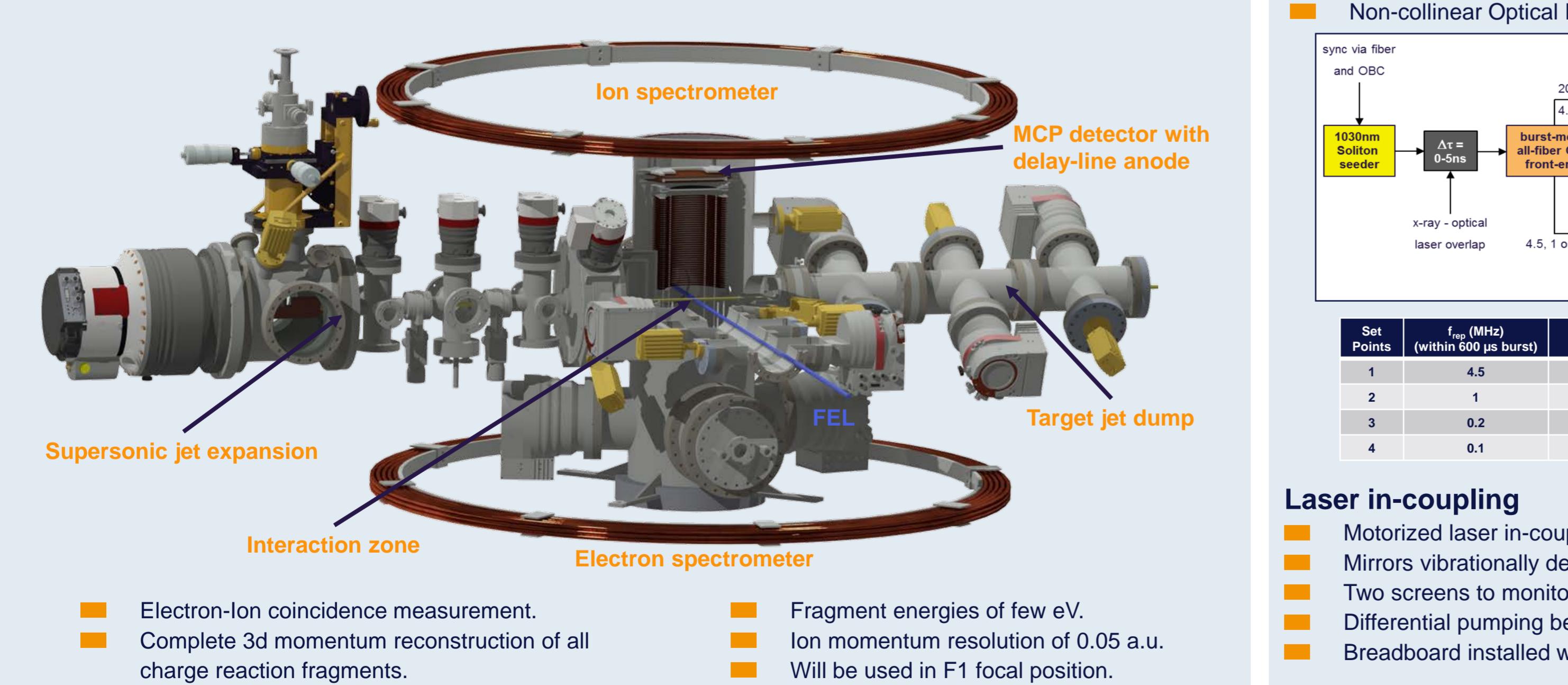
Atomic-like Quantum Systems (AQS)



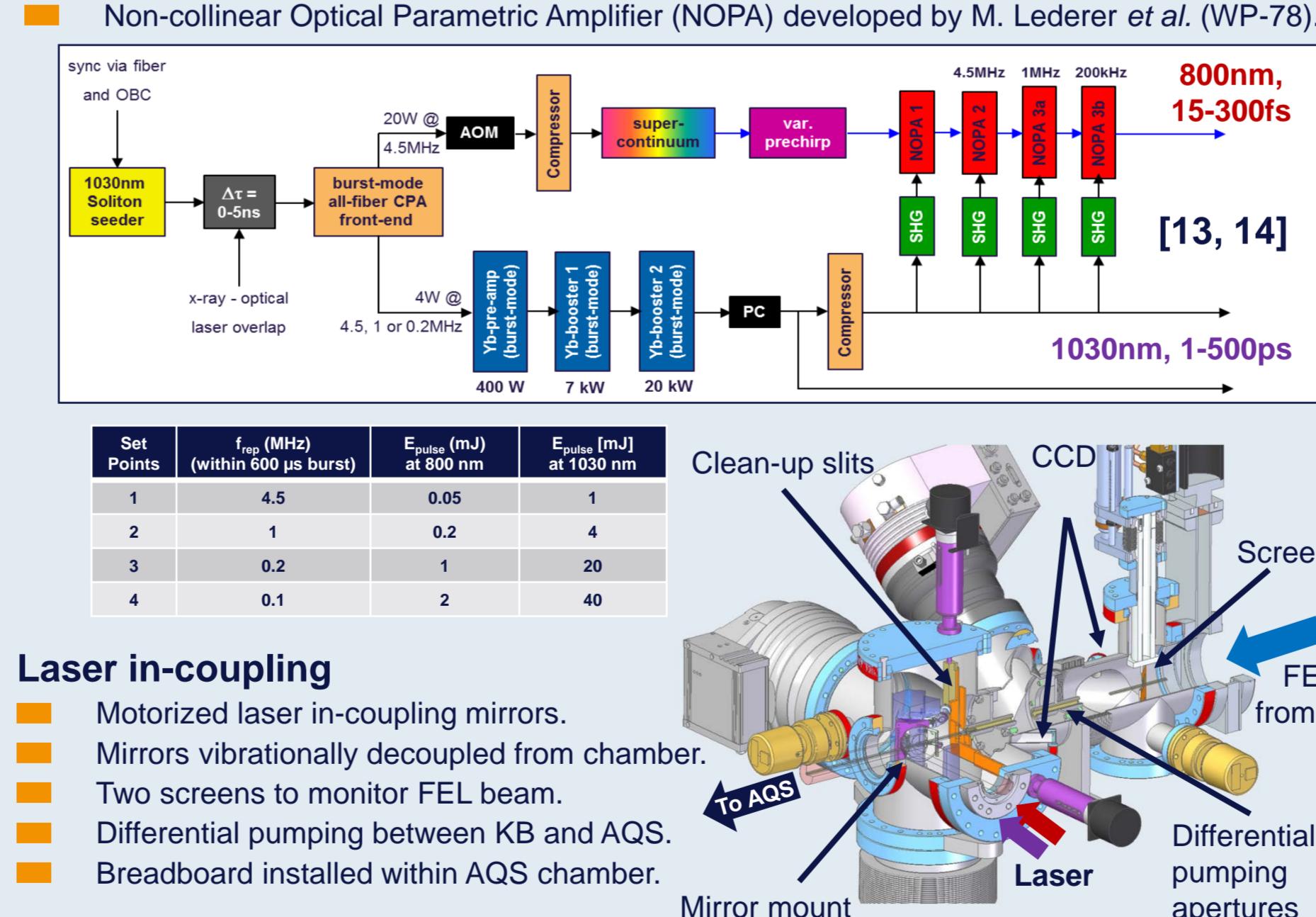
Nano-sized Quantum Systems (NQS)



Reaction Microscope (REMI) [1]



Optical Pump-Probe Laser



Status of the Instrument

- Assembly and test of individual components is ongoing at Hera South labs.
- Experiment hutch ready in September 2017.
- Instrument installation in the hutch from October 2017.
- First FEL beam possible from January 2018.
- Beamline and instrument commissioning in the first quarter of 2018.
- User operation starts in the second quarter of 2018.
- Pump-probe laser scheduled to operate second half of 2018.

References

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