



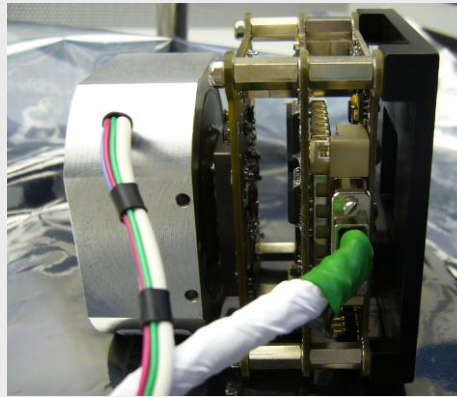
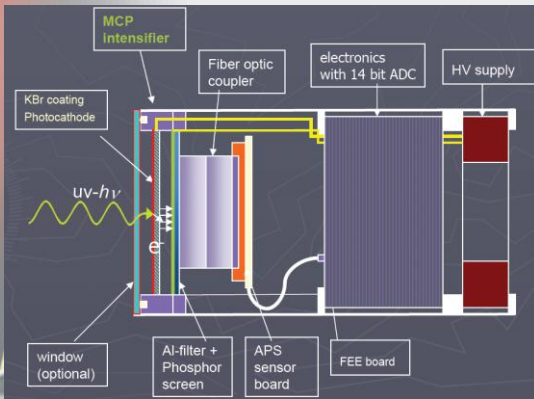
MAX-PLANCK-GESELLSCHAFT

Detector development for a Lyman- α imager

Udo Schühle

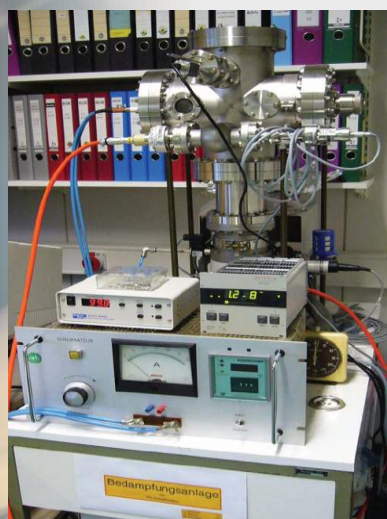
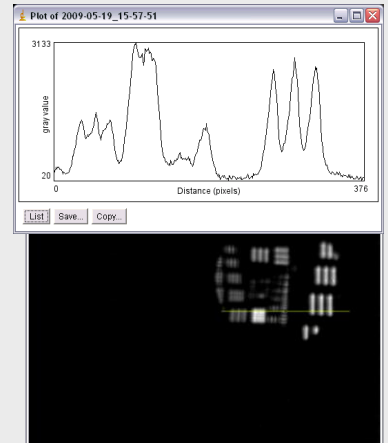
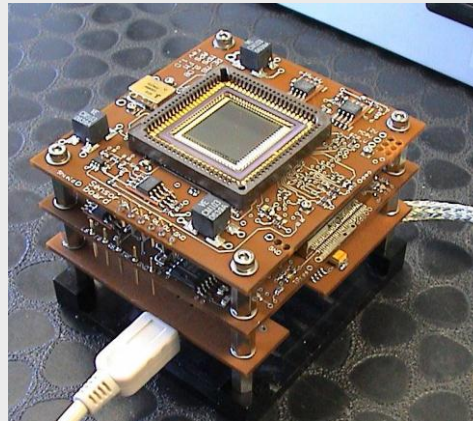


Camera design: A CMOS-APS detector is mated with a micro-channel plate intensifier that is coated with KBr to increase efficiency around 121 nm and reduce the efficiency above 160 nm. The MCP-intensifier with a phosphor screen output window will be mated with the APS-sensor by a fiber-optic block.



Sensor and electronics:

- STAR-1000 with 1024 x 1024 pixels
- electronic system designed and built entirely by MPS
- low-noise 14-bit ADC electronics
- USB interface for PC operation
- all radiation-hard design

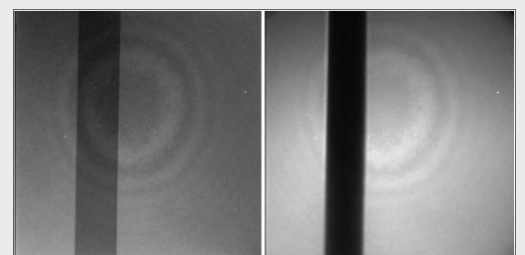


Photocathode deposition chamber and VUV vacuum test chamber



Intensifier testing:

- photocathode deposition (KBr, CsI)
- VUV testing and characterization, calibration



Selective photocathode coating and performance at 121.6 nm