Scint. Screen & Camera 2021 DESY Testbeam Ideas

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LUXE

DESY.

- Test triggering & image taking/storing function (should be easy enough)

- Observe image quality with varying screen thicknesses / camera resolution

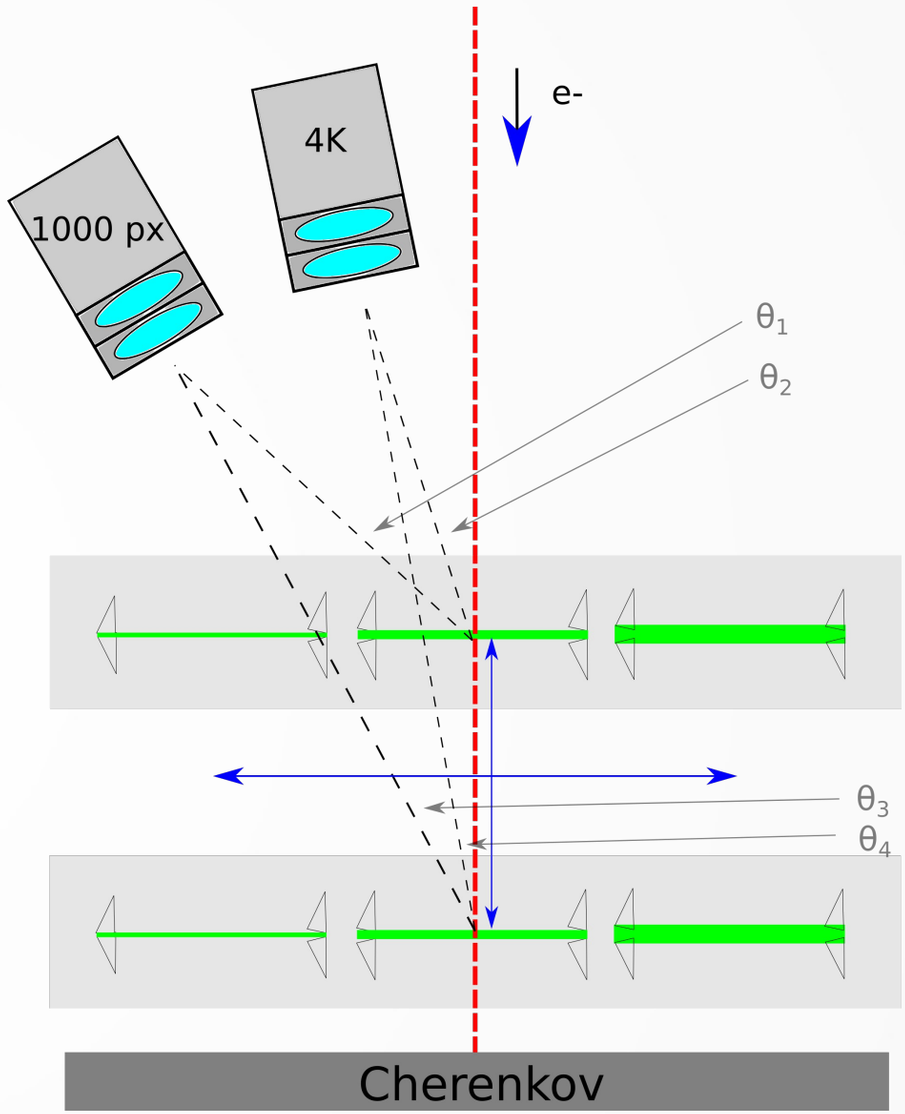
- Observe ambient optical levels for feasible light environment of final experiment, through optical wavelength filter

- Observe image intensity for varying angles

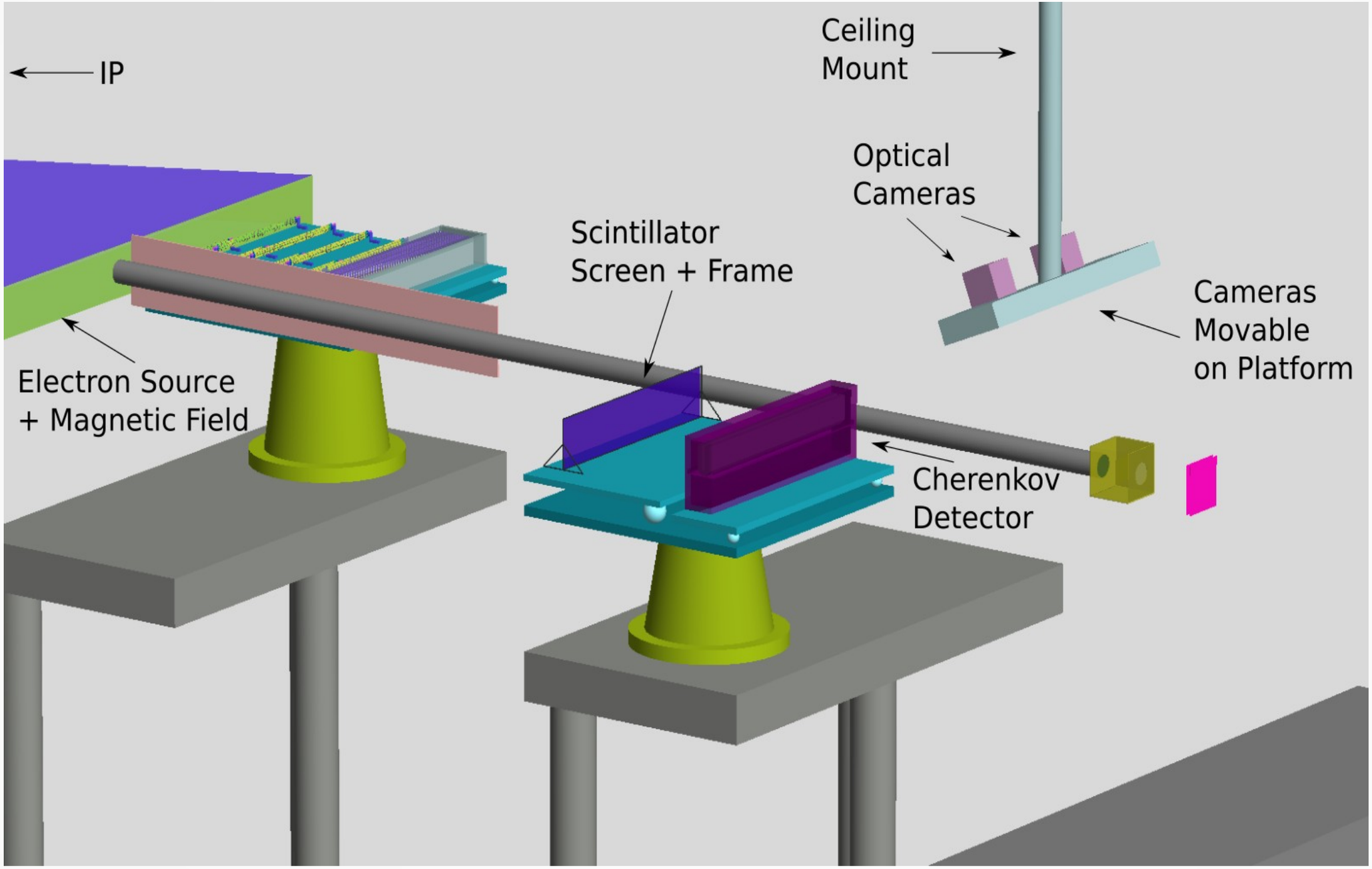
- These require very little beamtime in terms of input electrons, but might require frequent access to TB area. Could be smart about this though: have 2 camera species taking data at once and change screen by remotely movable stage?

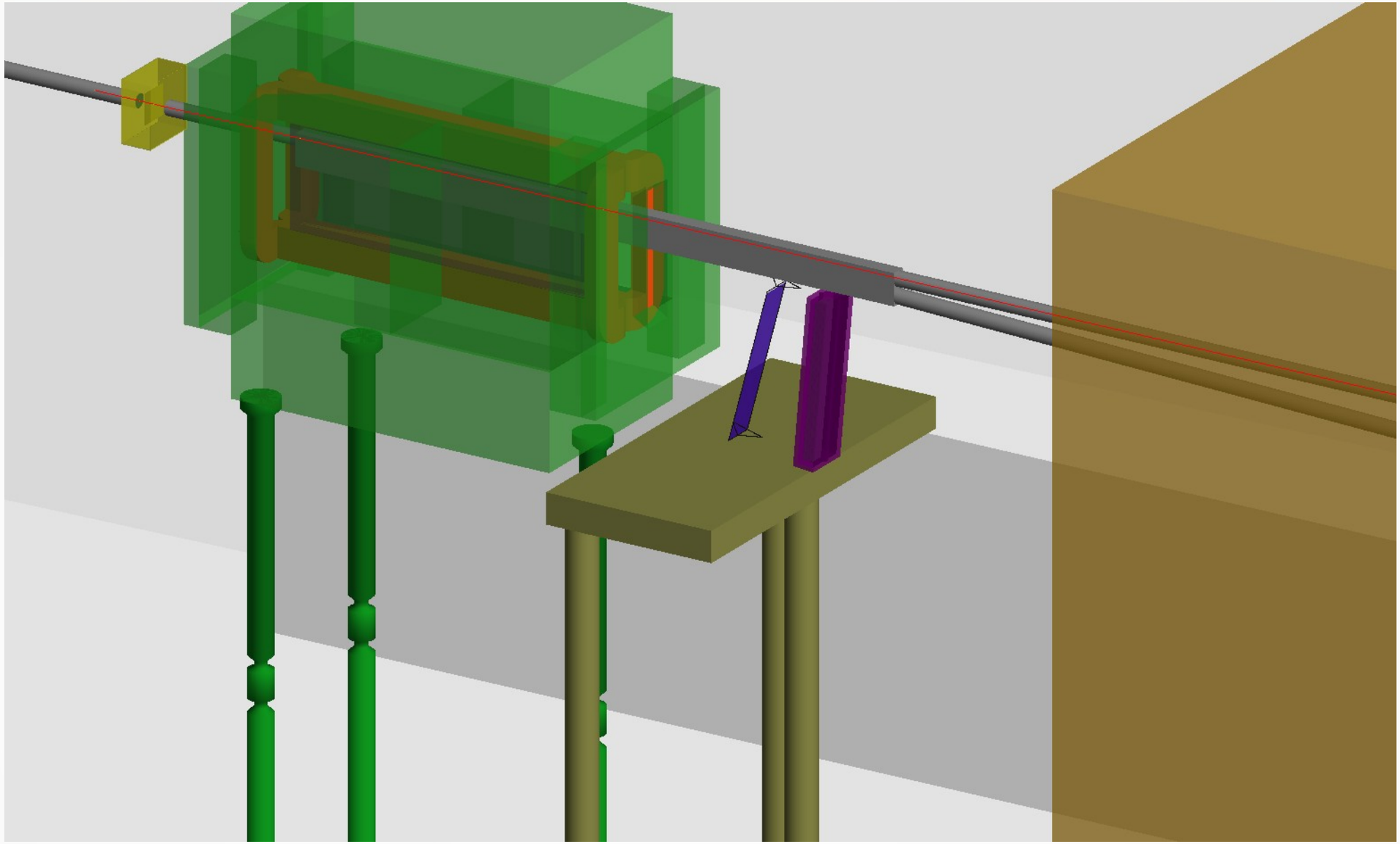
- Should share beamtime with Cerenkov. Of course the two systems are designed to be used always together...

- so we can monitor the effect of varying screen thickness on Cerenkov Signal (and also maybe case where Cerenkov device sits in front of the screen)



Backup


IP
Ceiling
Mount
Optical
Cameras
Scintillator
Screen + Frame
Cameras
Movable
on Platform
Electron Source
+ Magnetic Field
Cherenkov
Detector



Brem. Electron detectors