Tangential Divertor Camera

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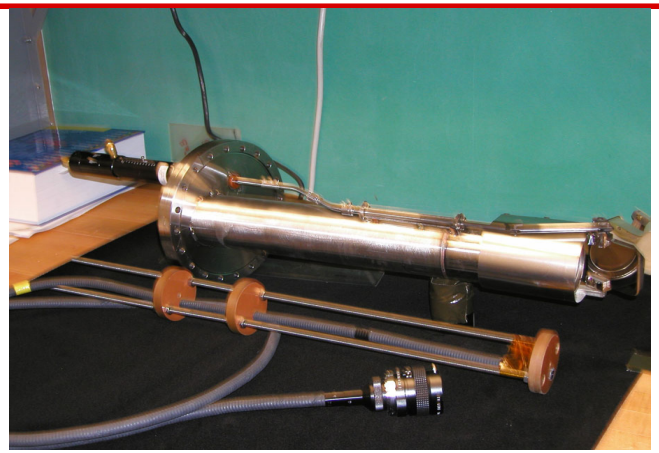
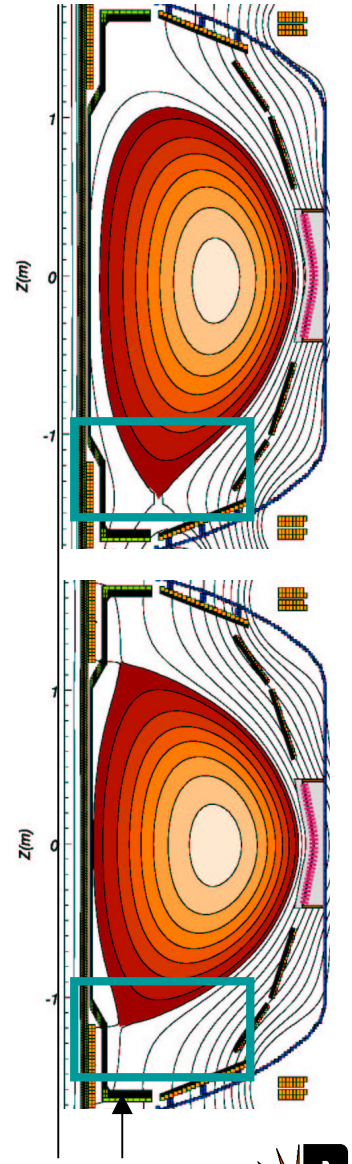


- Adjustable View from radially to ~ 20cm outboard of divertor X-Point.
- Utilizes Hiroshima fast camera (up to 45000 f/sec) and 4X4mm coherent fiber bundle(400X400 fibers)
- Sapphire window for bake out
- Viewing mirror doubles as shutter for GDC or boronization



CHI Gas injection

Applications

- 2-D gas puff imaging of turbulence (blobs) around divertor X-point utilizing CHI gas puffer with various gases (He, Ar, D2, Ne) and appropriate filter
- 2-D time averaged parallel velocity measurements. Two filters with sharp cut-off either side of characteristic wavelength to determine Doppler shift (Paul Method)
- Divertor detachment experiments. View the strike points during power scans to see if plasma stays in contact with divertor.
- Impurity transport across the separatrix
- Carbon distribution with CII and CV filters gives spatial information about Te in divertor region.
- 3D filtering $\rightarrow$ distribution in edge/divertor for modeling (UEDGE, BOUT)
- View CHI break down