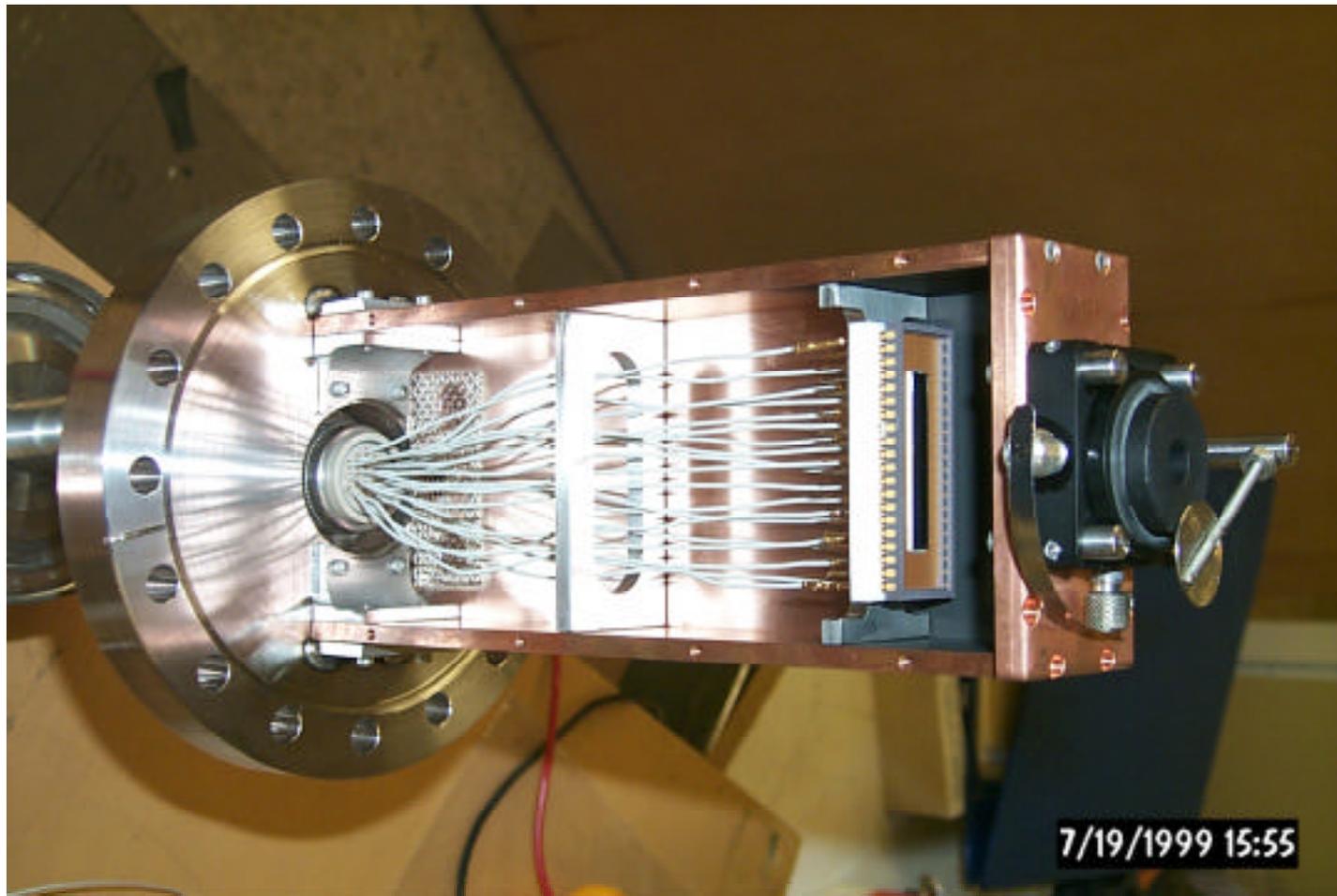


Tangential bolometer is a 16-channel XUV photodiode array



Bolometry TG for NSTX

Measurement Options:
Total P_{rad} vs. filtered P_{rad}

Needed information for modeling:

$$P = n_e n_i \langle v \rangle$$

Codes need values for T_e , n_e to calculate and n_i (or n_0)
from emitted power anyway

We need to choose:

P_{tot} or individual emission lines

Tangential vs. radial view

Spatial and temporal resolution

Need to image upper and lower divertor

Platinum bolometer: total P_{abs}

- Have platinum bolometers from TFTR
- Don't need T_e or n_e or n_i to obtain P_{abs}
- Codes will need to infer two of three to calculate the third quantity
- Gives no information about species
- Requires detectors in vacuum enclosure
- compact arrays not suitable

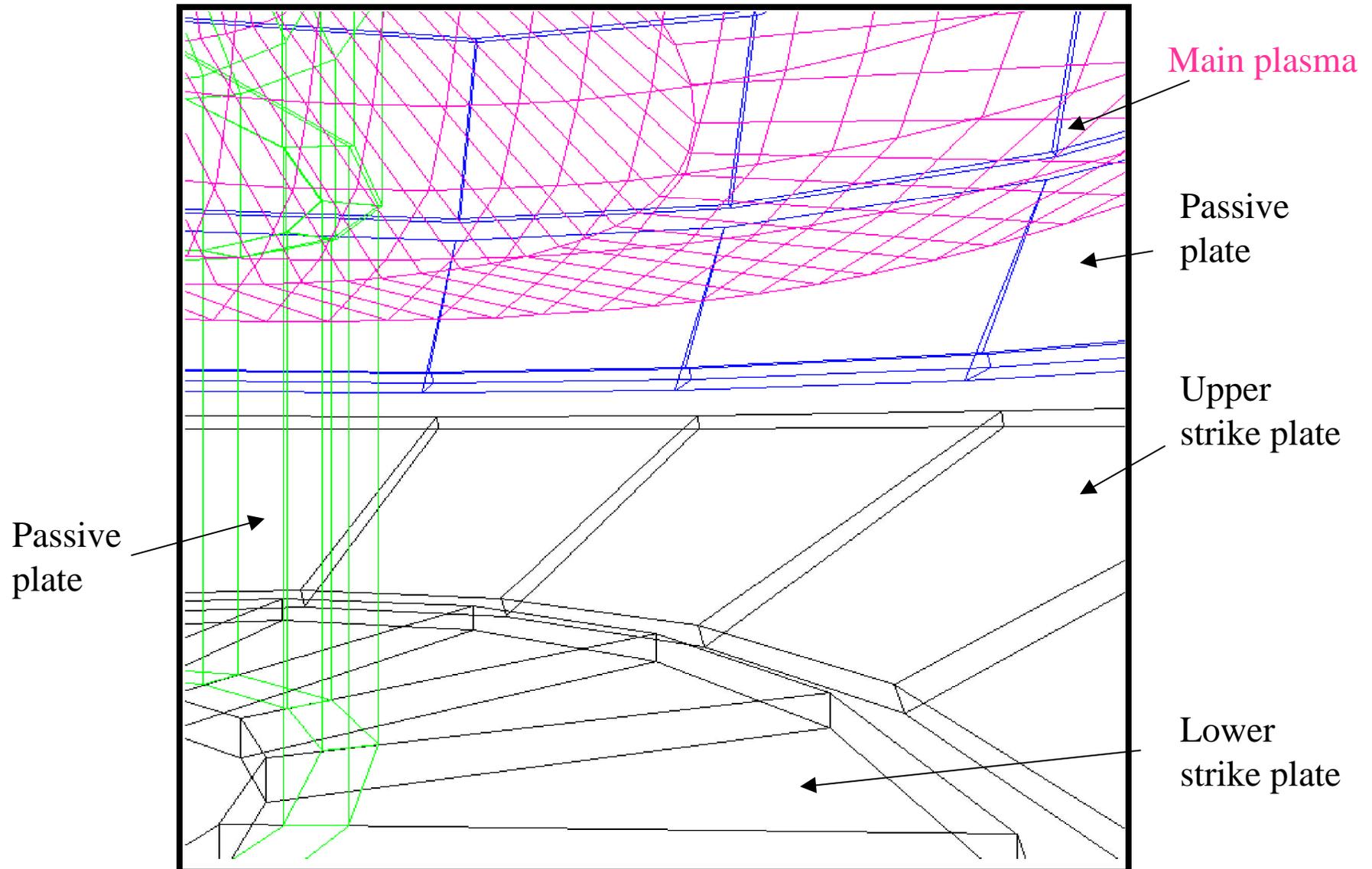
Divertor TV: H

- Very high spatial resolution
- Camera can be remotely located
- Tangential view
- Codes will need to infer two of three to calculate the third quantity
- Gives information about multiple species
- Need to purchase filters and cameras
- Needs T_e or n_e to obtain n_i from emission

Filtered XUV diode array: L

- Gives information about species
- Needs T_e or n_e to obtain n_i from emission
- Compact system
- Tangential view
- Codes will need to infer two of three to calculate the third quantity
- Gives information about species
- Need to purchase diodes, filters and cameras

Tangential view from lower region:



Tangential view from lower region:

