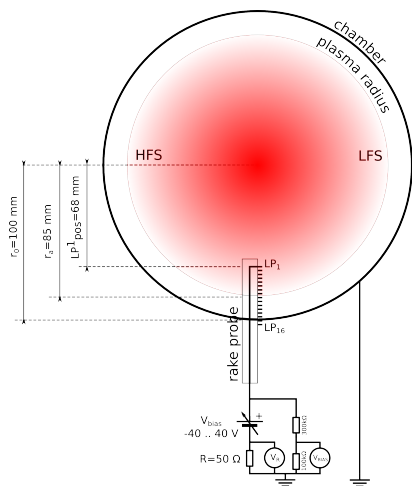


Probes@GOLEM: Double rake probe @ South-East-Down port



- Radial array of 16 Langmuir tips is immersed in the plasma from the bottom of the tokamak vessel, movable on the shot to shot basis.
- Tokamak discharge: Cylindrical probe diameter 0.7 mm, probe length 2 mm. Load resistance = 50Ω
- MW plasma: Planar probe 5×5 mm Load resistance $RL = 50 \text{ k}\Omega$ (because of much lower plasma densities)
- The DC voltage (from -40 to +40 V) is applied to a probe (No 1) on the shot to shot basis and the temporal evolution of the probe current is recorded with sampling frequency 1 MHz i.e. with temporal resolution 1 μ s.