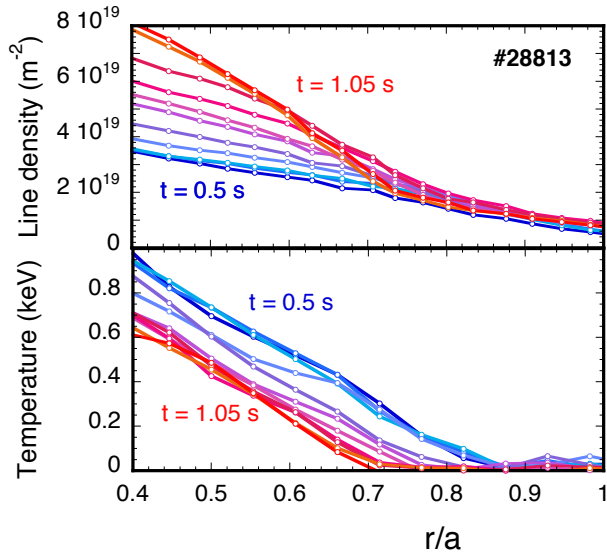
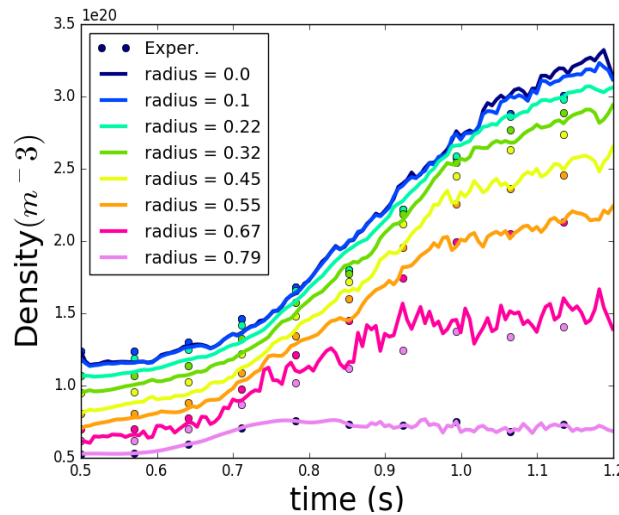
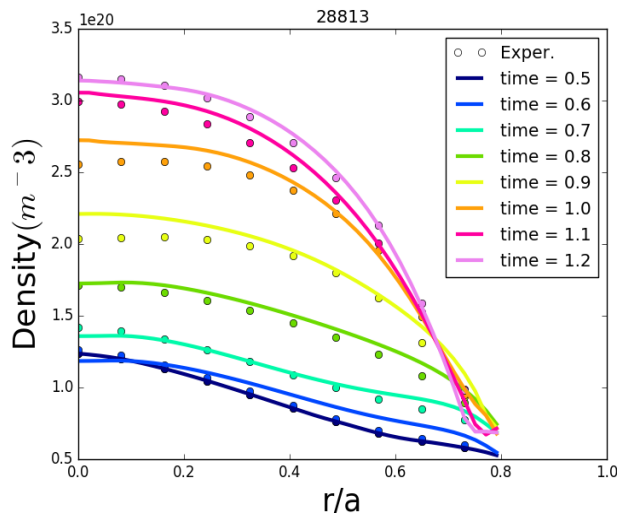


# Evidence of thermo-diffusive pinch in particle transport , O. Tudisco et al. (EX/P8-24)



- ❑ In presence of MARFE, Temperature at edges drops down and density rises in plasma core
- ❑ Source term increases cannot account for density raise at center
- ❑ Good simulations obtained for  $r/a < 0.8$  using a thermo-diffusive pinch term.



Particle flux:

$$\Gamma = D \frac{\partial n_e}{\partial r} - D_T \frac{n_e}{T_e} \frac{\partial T_e}{\partial r}$$

Thermo-diffusive pinch

Detailed density profiles from scanning interferometer (about 32 chords,  $\Delta r=1\text{cm}$ )