

Conclusions

- **Outer and inner divertors are more symmetric for larger machines and symmetry increases with seeding, i.e. for more detaches cases.**
- **Ambient plasma and impurity flow from outer to inner divertor both through upper SOL and PFR are more significant for smaller tokamaks like AUG and are less significant for larger machines.**
- **In larger machines ionization of neutral particles takes place closer to the plates and neutral impurities are better confined in the divertor.**
- **Impurities with higher ionization potential are more effectively extracted from the divertor towards upstream, so that N is kept better than Ne in the divertor region-FIP effect.**
- **Ne radiation is kept in divertor for big machines due to big temperature and big dimensions of the divertor as well as that of N. As a result, their protecting role for divertor targets shielding is comparable.**
- **According to modeling both gases can be used as radiators in JET and ITER.**