

- **In recent years, ELM filaments which are intermittent filamentary structure during ELMs has been observed in the edge plasma and scrape off layer (SOL).**
- **In this paper, the results of first measurements of heat fluxes toward the first wall of KSTAR device by electric probe is presented. Poloidal electric probes (PEPs), installed on the outer main chamber wall of KSTAR, are used to measure the far-SOL plasma parameters such as plasma density, electron temperature, ion saturation current, parallel Mach number and floating potential. From these measurements, ELM filament properties such as heat and particle flux, radial velocity and the effect of ELM filament on the first wall are evaluated.**
- **To expand the case of pure plasma in KSTAR to the case of impure and dusty plasmas, we performed experiments on heat flux to the wall in a linear plasma device, called DiPS-2 which has relevant physical parameters and geometry to simulate both the edge plasmas and ELM phenomena of toroidal devices. Fixed azimuthal probes are installed which are to be simulated the poloidal probes of KSTAR.**