

## Transport Group

### Group Leaders

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We aim to investigate transport and heating physics. In this group, we focus on obtaining basic knowledge of these physics rather than achieving high performance plasma. The development of heating schema, and of diagnostics are also covered in this group. Some experiments will be performed with other topical group.

### Main Research Tasks

1. Investigation of isotope effects in energy, particle, and impurity transports. Systematic study will be focused.
2. Investigation of effects of impurity on transport
3. Validation study between experimental observation and theoretical simulation
4. Investigation of H mode and other improved confinement, and its isotope effects
5. Basic study of zonal flow and its effects on transport and parameter dependence
6. Control of impurity accumulation
7. Investigation of core transport with plasma detachment
8. Investigation of non-diffusive and non-convective transport
9. Control of transport by the change of iota profiles using ECCD and NBCD
10. Development of code for the estimation of heating deposition of ECRH and NBI with high accuracy and its validation with experiment
11. Basic study of new heating schema
12. Development of diagnostics for transport and heating physics
13. Comparison of transport/heating physics with tokamak and other helical/stellarator devices

For more information

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