



Contribution ID: 41

Type: Oral

## Oral\_28: Overview of the T-15MD tokamak diagnostics

The preparation of the T-15MD tokamak for the first experiments has been almost completed now. The main parameters of T-15MD are:  $R = 1.48$  m,  $a = 0.67$  m,  $B = 2.0$  T,  $I_{pl} = 2.0$  MA. Scientific objectives of the T-15MD are: investigation of the particle and energy transport in the ITER-like plasma configuration; disruption mitigation system development; plasma turbulence investigations; plasma edge physics; divertor optimization and first wall materials investigations under reactor-like power load on the divertor plates; steady-state operation; investigations of the advanced tokamak regimes with the real time MHD activity and current density profile control. To meet this challenge, the tokamak should be equipped with state-of-art diagnostics, real time plasma control, auxiliary heating and current drive systems. Therefore, in the vacuum vessel design, a special attention was focused to the convenient placement of the diagnostics and heating systems.

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