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Supersonic Molecular Beam Injection Effects on Tokamak Plasma Applied Non-axisymmetric Magnetic Perturbation[1] HYUNSUN HAN, Y. IN, Y.M. JEON, S.H. HAHN, K.D. LEE, Y.U. NAM, S.W. YOON, Nuclear Fusion Research Institute — In KSTAR experiments, the change of tokamak plasma behavior by supersonic molecular beam injection (SMBI) was investigated by applying resonant magnetic perturbations(RMP) that could suppress edge localized modes (ELMs). When the SMBI is applied, the symptom representing ELM suppression by RMP is disappeared. The SMBI acts as a cold pulse on the plasma keeping the total confinement engergy constant. However, it makes plasma density increase and change the plasama collisionality which can play a role in the edge-pedestal build-up processing.

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