# Consensus Control for T-S Fuzzy Multi-Aagent System under Parametric Uncertainties

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**Résumé**

The paper investigates applying a Takagi-Sugeno (T-S) fuzzy model-based consensus control strategy to multi-agent systems dealing with uncertainties. The proposed stability conditions are derived by Lyapunov stability analysis using Linear Matrix Inequalities (LMIs) to compute control gains, that aim to achieve consensus in the presence of parametric uncertainties. Simulation results are provided to illustrate the effectiveness of the approach in achieving the consensus.

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