

Robust Fusion Algorithms for Linear Dynamic System with Uncertainty

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Abstract- In this paper, two robust fusion algorithms for a linear system with observation uncertainty are proposed. The first algorithm is based on the classical median function and the second one uses relative distances between local estimates and their median value. In the view of estimation accuracy, the proposed fusion algorithms can be robust against uncertainty measurements since median can avoid extremely big or small values. This fact is verified from comparative analysis using numerical examples.