The Estimation And Error Correction For A Target Tracking System

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ABSTRACT

In a radar system, it usually has more measurement plots than the number of target tracks because of the complicated tracking environment and noise outsides. The key developments of this subjest are association and maneuvering target detection algorithm. In this thesis, the author intends to combine Data Association Algorithm and Adaptive Extended Kalman Filter, combines with the technical data of One-Step Conditional Maximum Likelihood. Via this approach, the tracking procedure and error estimation can be obtained. Target maneuvering productive great errors can be decreased and the tracking system will obtain better performace.

Keywords : Data Association ; Extended Kalman Filter ; Maneuvering

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