多模組架構應用於雷達追蹤系統之研究

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摘 要

多目標追蹤在雷達系統是非常重要的，為了追蹤多變速度目標，本論文研究一個新的追蹤模式，其為應用適應性多模預估器於雷達系統之研究，基本的概念為將目標定義一個數學模型，在雷達估測和真實目標之間使用一種名為1-step conditional maximum likelihood資料結合技術，並推導適應性多模組演算法解決目標變速度問題，這演算法是用一系列的卡門濾波器當作適應性變速度的補償，將改良的追蹤演算法應用於多變速度目標追蹤。電腦模擬結果指出能順利追蹤多個目標並且也有更好的性能。

關鍵詞 : 適應性多模預估器、資料結合技術、卡門濾波器

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