

應用最佳估測原理於雷達追?系統之研究

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摘要

在雷達追蹤系統中，如何有效的掌握目標運動狀態是非常重要的，其中以變速度檢測技術以及資料結合技術為影響目標追蹤成效以及準確率的重要關鍵。變速度檢測技術在於當目標以變加速度運動時，此時會造成量測誤差變大，需要另外給予濾波器補償參數，以免誤差過大造成追蹤失敗。雷達在做多目標追蹤時，為了正確的耦合目標的估計值以及量測值，需要以資料結合技術加以判斷，以減少目標追蹤所造成的誤差。除此之外，在雷達追蹤系統中，為了得到最佳的估測結果，本論文提出應用最佳估測原理於雷達追?系統做目標追蹤，以增加追?系統的調適性及反應速度。藉此輔助目標追蹤，增加雷達追蹤目標的判斷能力，以求得更精確的量測結果。

關鍵詞：變速度檢測技術、資料結合技術、最佳估測原理

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