適應性濾波器效能分析之研究

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摘 要

中文摘要 在雷達追蹤系統的研究方面，如何有效地掌握目標物的真實軌跡是雷達追蹤系統效能好壞的重要因素之一。在追蹤過程之中，測量目標物行進時，若掃瞄速率過快，會造成系統運算負荷過重，反之又將使誤差變大，因此如何掌握恰當的掃瞄速率，以及如何減少追蹤誤差是非常重要的。 雷達系統中，為達到最佳的追蹤效果，追蹤濾波器扮演著非常重要的角色；然而，為因應複雜的目標環境，並降低因目標突然變速或改變方向而造成的重大誤差，吾人乃設計一適應性濾波器，以取代傳統之濾波器，並利用MATLAB模擬分析其效能，期望利用此效能分析，了解其可靠度，並與傳統濾波器的結果相比較，以凸顯其優異性。

關鍵詞 : 雷達系統 ; 適應性濾波器 ; 效能分析

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