

# 應用多領域最佳化方法與拓樸最佳化之研究

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## 摘要

拓樸最佳化最大問題主要在於計算時間冗長，計算資源耗費龐大。目前有關拓樸最佳化設計的研究，大部分使用單一系統，亦即在一個最佳化問題中同時處理所有變數。本文利用多領域最佳化方法，將單一結構系統分解成若干次系統，進行同步最佳化設計。各次系統最佳化之協調機制藉由分配各次系統滿足其他系統的限制條件之責任達成。結果顯示，本文所提出的同步次系統最佳化方法，可以獲得良好拓樸設計，提供拓樸最佳化平行運算的可能性，有效減少設計時間。

關鍵詞：多領域最佳化；非層次分解法；拓樸最佳化

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