

论文与报告

分散固定阻塞零点与分散强镇定

熊运鸿, 高为炳

北京航空航天大学七所

收稿日期 1993-8-5 修回日期 网络版发布日期 接受日期

摘要

研究多通道系统的分散强镇定问题. 对集中控制系统的阻塞零点概念提出一种推广的定义. 在此基础上, 对分散控制系统引入了关于通道及系统的分散固定阻塞零点等概念, 揭示出分散系统的阻塞零点与反馈结构的关系. 利用这种关系, 在比已有结论更弱的假定下, 给出了可分散强镇定的充分必要条件及相应控制器求解的一般步骤.

关键词 [分散控制](#) [分散固定阻塞零点](#) [分散强镇定](#)

分类号

Decentralized Fixed Blocking Zeros and Decentralized Strong Stabilization

Xiong Yunhong, Gao Weibing

The 7th Research Division, Beijing University of Aero. & Astro. Beijing

Abstract

This paper is concerned with decentralized strong stabilization problem of linear time-invariant multi-channel systems. First, after generalizing the notion of blocking zeros to systems which are not necessarily controllable and observable, decentralized fixed blocking zeros with respect to each channel and with respect to the whole system are introduced. Then, under a weaker assumption than previous results, a necessary and sufficient condition for stabilization to occur with stable decentralized controllers, termed in such zeros, is proved. The constructive proof also provide also provide a procedure for synthesizing such controllers.

Key words [Decentralized control](#) [decentralized fixed blocking zeros](#) [decentralized strong stabilization](#)

DOI:

通讯作者

作者个人主

页

熊运鸿; 高为炳

扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF \(491KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [参考文献\[PDF\]](#)

▶ [参考文献](#)

服务与反馈

▶ [把本文推荐给朋友](#)

▶ [加入我的书架](#)

▶ [加入引用管理器](#)

▶ [复制索引](#)

▶ [Email Alert](#)

▶ [文章反馈](#)

▶ [浏览反馈信息](#)

相关信息

▶ [本刊中 包含“分散控制”的 相关文章](#)

▶ 本文作者相关文章

· [熊运鸿](#)

· [高为炳](#)