覆盖对策的核心稳定性条件

方奇志

中国海洋大学数学科学学院, 青岛 266071

摘要   覆盖对策是建立在最优集合覆盖问题基础上的合作对策模型.
研究覆盖对策的核心稳定性. 基于线性规划对偶理论,
给出了一定条件下覆盖对策核心的刻划及其具有稳定核心的充要条件,
并将结果应用到若干具体的对策模型中.

关键词   集合覆盖, 核心, 稳定集, 核心稳定性, 对偶定理.

分类号 05C70, 91A12

Conditions on Core Stability of Covering Games

FANG Qizhi

School of Mathematics, Ocean University of China,
Qingdao 510632

Abstract This paper focuses on the core stability of
covering games, which arise from minimum set cover problems. Based
on duality theory of linear programming, a characterization
of the core is given and a sufficient and necessary condition is proposed on the
core stability of a covering game under K\"{o}nig Condition. These
results can be applied to some concrete covering games.

Key words   Set cover   core   stable set   core stability   LP duality

DOI:

通讯作者