

Original Articles

## Randomly Orthogonal $(g, f)$ -factorizations in Graphs

Gui Zheng LIU(1), He Ping LONG(2)

(1)Department of Mathematics, Shandong University; (2)Department of Mathematics, Shandong University at Weihai

收稿日期 修回日期 网络版发布日期 接受日期

**摘要** Let  $G$  be a graph with vertex set  $V(G)$  and edge set  $E(G)$  and let  $g$  and  $f$  be two integer-valued functions defined on  $V(G)$  such that  $2k - m \leq h(f(x))$  for all  $x \in V(G)$ . Let  $H$  be a subgraph of  $G$  with  $mk$  edges. In this paper it is proved that every  $(mg + m - 1, mf - m + 1)$ -graph  $G$  has  $(g, f)$ -factorizations randomly  $k$ -orthogonal to  $H$  and shown that the result is best possible.

**关键词** [graph](#) [\(g, f\)-factorization](#) [randomly k](#)

分类号

## Randomly Orthogonal $(g, f)$ -factorizations in Graphs

Gui Zheng LIU(1), He Ping LONG(2)

(1)Department of Mathematics, Shandong University; (2)Department of Mathematics, Shandong University at Weihai

**Abstract** Let  $G$  be a graph with vertex set  $V(G)$  and edge set  $E(G)$  and let  $g$  and  $f$  be two integer-valued functions defined on  $V(G)$  such that  $2k - m \leq h(f(x))$  for all  $x \in V(G)$ . Let  $H$  be a subgraph of  $G$  with  $mk$  edges. In this paper it is proved that every  $(mg + m - 1, mf - m + 1)$ -graph  $G$  has  $(g, f)$ -factorizations randomly  $k$ -orthogonal to  $H$  and shown that the result is best possible.

**Key words** [graph](#) [\(g, f\)-factorization](#) [randomly k](#)

DOI:

通讯作者 Gui Zheng LIU [gqliu@math.sdu.edu.cn](mailto:gqliu@math.sdu.edu.cn)

扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF\(0KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [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“graph”的 相关文章](#)

▶ 本文作者相关文章

· [Gui Zheng LIU](#)

· [He Ping LONG](#)