

SPLITTING CUBIC CIRCLE GRAPHS

LORENZO TRALDI

Lafayette College
Easton, Pennsylvania 18042

e-mail: traldil@lafayette.edu

Abstract

We show that every 3-regular circle graph has at least two pairs of twin vertices; consequently no such graph is prime with respect to the split decomposition. We also deduce that up to isomorphism, K_4 and $K_{3,3}$ are the only 3-connected, 3-regular circle graphs.

Keywords: circle graph, split decomposition, regular graph.

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