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A new proof of 3-colorability of Eulerian triangulations

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Abstract

Using the existence of noncrossing Eulerian circuits in Eulerian plane graphs, we give a short constructive proof of the theorem of Heawood that Eulerian triangulations are 3-colorable.

Keywords: Plane triangulation, Eulerian circuit, 3-colorable, Heawood's Theorem.

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Nov dokaz 3-obarvljivosti Eulerjevih konfiguracij

Povzetek

Z uporabo neseekajočih se Eulerjevih sprehodov v Eulerjevih ravninskih grafih podamo kratek konstruktiven dokaz Heawoodovega izreka, ki pravi, da so Eulerjeve triangulacije 3-obarljive.

Ključne besede: Ravninske triangulacije, Eulerjev obhod, 3-obarvljiv, Heawoodov izrek.