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## Chamfering operation on $k$ -orbit maps

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**Abstract:** A map, as a 2-cell embedding of a graph on a closed surface, is called a  $k$ -orbit map if the group of automorphisms (or symmetries) of the map partitions its set of flags into  $k$  orbits. Orbanić, Pellicer and Weiss studied the effects of operations as medial and truncation on  $k$ -orbit maps. In this paper we study the possible symmetry types of maps that result from other maps after applying the chamfering operation and we give the number of possible flag-orbits that has the chamfering map of a  $k$ -orbit map, even if we repeat this operation  $t$  times.

Math. Subj. Class.: 52B15, 05C10, 57M15, 51M20, 52B10

**Keywords:** Map, flag graph, symmetry type graph, chamfering operation.

## Operacija preskoka na $k$ -orbitnih zemljevidih

**Abstract:** Zemljevid, kot 2-celična vložitev grafa na sklenjeno ploskev, se imenuje  $k$ -orbiten zemljevid, če grupa avtomorfizmov (oz. simetrij) zemljevida razdeli množico njegovih praporov v  $k$  orbit. Orbanić, Pellicer in Weiss so študirali učinke operacij, kot sta medial in prisekanje na  $k$ -orbitnih zemljevidih. V tem članku študiramo možne simetrijske tipe zemljevidov, ki jih dobimo iz drugih zemljevidov z operacijo preskoka, in podamo število možnih orbit praporov tako dobljenih zemljevidov, dobljenih iz  $k$ -orbitnih zemljevidov, tudi če uporabimo to operacijo  $t$ -krat.

Math. Subj. Class.: 52B15, 05C10, 57M15, 51M20, 52B10

**Ključne besede:** Zemljevid, graf praporov, simetrijski graf, operacija preskoka.