Povzetek

V delu je opisan problem obstoja povsod neničelnega pretoka v splošnem grafu. Posebno pozornost smo posvetili povsod neničelnim k-pretokom. Narejen je dokaz za obstoj povsod neničelnega 6-pretoka v splošnem grafu, kar je do sedaj tudi najboljši rezultat za ta primer. Ogledali smo si nekatere rezultate o k-pretokih za majhne vrednosti k, pri čemer smo zahtevali dodatne lastnosti grafa. Poleg znanih rezultatov pa smo si ogledali tudi nekatere pomembne domneve. Pogledali smo povezavo med povsod neničelnimi pretoki in nekaterimi drugimi problemi teorije grafov, kot sta barvanje grafov in dvojno pokritje s cikli. Na koncu smo si ogledali še najmanjše primere in protiprimere za domneve o obstoju povsod neničelnih pretokov.

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