

Abstract :

We analyze *acceptant* and *substitutable* choice rules that are prominently used in resource allocation problems. We discipline the structure of *collected maximal representation* of these choice rules due to Aizerman and Malishevski (1981) by restricting the number of priorities that appear in the representation.

We constructively show that the number of *prime atoms* of a choice rule determines the smallest size collected maximal representation. We observe that *responsive* choice rules render collected maximal representations of the largest size among all acceptant substitutable choice rules. Finally, we characterize collected maximal choice rules in which the number of priorities equals the capacity.

It follows from this characterization that if the difference between the size of the universal set of elements and the capacity is bigger than two, then it is impossible to have such a choice rule.