

FAULT TOLERANT DETECTORS FOR DISTINGUISHING SETS IN GRAPHS

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Abstract

For various domination-related parameters involving locating devices (distinguishing sets) that function as places from which detectors can determine information about the location of an “intruder”, several types of possible detector faults are identified. Two of these fault tolerant detector types for distinguishing sets are considered here, namely redundant distinguishing and detection distinguishing. Illustrating these concepts, we focus primarily on open-locating-dominating sets.

Keywords: distinguishing sets, fault tolerant detectors, redundant distinguishing open-locating-dominating set, detection distinguishing open-locating-dominating set.

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