

## INTERIOR GE-FILTERS OF GE-ALGEBRAS

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### Abstract

The notions of an interior GE-filter, a weak interior GE-filter and a belligerent interior GE-filter are introduced, and their relations and properties are investigated. Example of a GE-filter which is neither an interior GE-filter nor a weak interior GE-filter is provided. Relations between a weak interior GE-filter and an interior GE-filter are discussed, and conditions under which every weak interior GE-filter is an interior GE-filter are investigated. Relations between a belligerent interior GE-filter and an interior GE-filter are displayed, and conditions for an interior GE-filter to be a belligerent interior

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GE-filter are considered. Given a subset and an element, an interior GE-filter is established, and conditions for a subset to be a belligerent interior GE-filter are discussed. The extensibility of the belligerent interior GE-filter is debated. Relationships between weak interior GE-filter and belligerent interior GE-filter of type 1, type 2 and type 3 are founded.

**Keywords:** (transitive, left exchangeable) GE-algebra, GE-filter, belligerent GE-filter, (weak) interior GE-filter, belligerent interior GE-filter (of type 1, type 2 and type 3).

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