

## **Weak- and semi-normalization in real algebraic geometry**

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**Abstract.** We define the weak-normalization and the seminormalization of a real algebraic variety relative to its central locus. The study is related to the properties of the rings of continuous rational functions and hereditarily rational functions on real algebraic varieties. We provide in particular several characterizations (algebraic or geometric) of these varieties, and give a full description of centrally seminormal curves.

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