Paola D’Aquino, Salma Kuhlmann and Karen Lange* (karen.lange@wellesley.edu), Department of Mathematics, Wellesley College, 106 Central St, Wellesley, MA 02481. An algebraic characterization of recursively saturated real closed fields.

We give a valuation theoretic characterization for a real closed field to be recursively saturated. This builds on work in (KKMZ), where the authors gave such a characterization for $\kappa$-saturation, for a cardinal $\kappa \geq \aleph_0$. Our result extends the characterization of Harnik and Ressayre (HR) for a divisible ordered abelian group to be recursively saturated.


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