

A few remarks on splitting ultra-metrics by T_0 -ultra-quasi-metrics

Hans-Peter A. Künzi

Co-author: Francky Mathieu Solofomananirina Tiantsoa

Address of Speaker: Dept. Math. Appl. Math., University of Cape Town, Rondebosch 7701, South Africa

We continue joint work with Conradie, Gaba and Yıldız (see [1, 2, 3, 5]).

Given a T_0 -ultra-quasi-metric u on a set X , we write u^s for its symmetrization $u \vee u^{-1}$. We argue that there exists a T_0 -ultra-quasi-metric v on X such that $v \leq u$, $v^s = u^s$ and the specialization order of v is linear. We also discuss connections of this statement with related results from the literature (see e.g. [4,6]).

References:

[1] J. Conradie and H.-P.A. Künzi, Asymmetric norms given by symmetrization and specialization order, preprint 2018.

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[4] H. Herrlich, Ordnungsfähigkeit total-diskontinuierlicher Räume, *Math. Annalen* 159 (1965), 77-80.

[5] H.-P.A. Künzi and F. Yıldız, Extensions of T_0 -quasi-metrics, *Acta Math. Hungar.* 153 (1) (2017), 196-215.

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