

Relations Between Symmetric Density and Local Symmetric Connectedness

NEZAKAT JAVANSHIR

Ankara Yıldırım Beyazıt University, Department of Mathematics, Ankara-Turkey
nezakat.javanshir@aybu.edu.tr

The theory of symmetric connectedness was established within the framework of T_0 -quasi-metric spaces in [1]. Additionally, locally symmetrically connected T_0 -quasi-metric spaces were introduced in [2]. Subsequently, a new type of density called symmetrically-dense was constructed in [3].

This presentation associates the theory of symmetric density with local symmetric connectedness and provides some relevant examples in T_0 -quasi-metric spaces. In this context we also discuss whether any symmetrically-dense subspace of a locally symmetrically connected T_0 -quasi-metric space is locally symmetrically connected or not.

References

- [1] F. Yıldız and H.-P. A. Künzi, Symmetric Connectedness in T_0 -quasi-metric spaces, Bull. Belg. Math. Soc. Simon Stevin, Vol. 26 (5), 659–679, 2019.
- [2] Javanshir N., Yıldız F., Locally symmetrically connected T_0 -quasi-metric spaces, Quaestiones Mathematicae, DOI: 10.2989/16073606.2021.1882602, 2021.
- [3] H.-P. A. Künzi, F. Yıldız and N. Javanshir, Symmetrically and Antisymmetrically-Dense Subspaces of T_0 -Quasi-Metric Spaces, Topology Proceedings, Vol. 61, 215–231, 2023.

*This is joint work with Filiz YILDIZ (Hacettepe University).