

# İSTANBUL ANALYSIS SEMINARS

## ON A SPECIAL UNIVERSAL SPACE

Asuman GÜVEN AKSOY

Claremont McKenna College  
Department of Mathematics

**Abstract:** In a paper published posthumously, P.S. Urysohn [3] constructed a complete, separable metric space that contains an isometric copy of every complete separable metric space; it is now referred to as the Urysohn universal space. In this talk, I examine various convexity properties of this “special” universal space and show that it has a finite ball intersection property even though the Urysohn universal space is not hyperconvex [2]. (This is a joint work with Z. Ibragimov [1]).

## References

- [1] A.G. Aksoy & Z. Ibragimov, “Finite ball intersection property of the Urysohn universal space,” arXiv:1309.7381.
- [2] J.R. Isbell, “Six theorems about injective metric spaces,” *Comment. Math. Helv.* **39** (1964), 65-76.
- [3] S. Urysohn, “Sur un espace métrique universel,” *Bull. Sci. Math.* **51** (1927), 43-64 & 74-96.

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