

# Ideal analytic sets

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Showing analytic completeness of given analytic set  $A$  is one of few options to prove, that  $A$  is not Borel. In the talk we will discuss results concerning some examples of coanalytic ideals on  $\omega$  (treated as a subset of Cantor space)[1]. From there we will also derive a result about trees associated with Mathias forcing.

Presented results are obtained together with my supervisor, Szymon Żeberski.

## References

- [1] R. Filipów, K. Kowitz, A. Kwela *A unified approach to Hindman, Ramsey and van der Waerden spaces*, preprint (2023), arXiv:2307.06907 [math.GN]
- [2] Rafał Filipów, On Hindman spaces and the Bolzano-Weierstrass property, *Topology Appl.* 160 (2013), no. 15, 2003-2011
- [3] Alexander S. Kechris, *Classical Descriptive Set Theory*, Springer-Verlag New York, Inc. 1995