

- FRANCESCO PARENTE, *Ultrafilters on the Cohen algebra*.

In this talk, I will analyse combinatorial aspects of ultrafilters on the Cohen algebra, focusing in particular on the Tukey ordering and the ultrafilter number. For the first part, I will present some consistency results concerning the existence of ultrafilters which are not Tukey maximal. As for the ultrafilter number of the Cohen algebra, I aim to discuss its relation with the cardinals in Cichoń's diagram.

These results have been obtained in collaboration with Brendle [1, 2] and more recently with Brendle and Hrušák [3].

[1] JÖRG BRENDLE AND FRANCESCO PARENTE, *Combinatorics of ultrafilters on Cohen and random algebras*, *The Journal of Symbolic Logic*, vol. 87 (2022), no. 1, pp. 109–126.

[2] JÖRG BRENDLE AND FRANCESCO PARENTE, *Orderings of ultrafilters on Boolean algebras*, *Topology and its Applications*, vol. 323 (2023), 108279.

[3] JÖRG BRENDLE, MICHAEL HRUŠÁK, AND FRANCESCO PARENTE, *Almost refinement, reaping, and ultrafilter numbers*, [arXiv:2410.18595](https://arxiv.org/abs/2410.18595) [math.LO].