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Slaloms–functions from ω into finite subsets of ω–were introduced by Bartoszyski [1] in the context of measure and category to compare the additivity of Lebesgue measure with the additivity of the meager ideal. Since then, they have become a fundamental tool in the combinatorial study of the real line, especially in the analysis of cardinal invariants of the continuum and Cichoń's diagram. References [3, 4] offer thorough surveys of these invariants, covering a wide range of research literature.

In this talk, I will present recent work in which we introduce several new relations based on slaloms, leading to novel cardinal invariants that capture finer notions of localization and anti-localization in ω^ω. These invariants reveal additional combinatorial structure of the reals and yield new characterizations of classical cardinals appearing in Cichos diagram. I will also discuss consistency results showing how these new invariants can be separated from the classical ones by forcing.

This is joint work with Jörg Brendle and Miroslav Repický [2].

[1] Tomek Bartoszyński. *Additivity of measure implies additivity of category.* Trans. Amer. Math. Soc., 281(1):209 213, 1984.

[2] Jörg Brendle, Miguel A. Cardona and Miroslav Repický. *Constant localization and anti-localization cardinals.* In preparation.

[3] Miguel A. Cardona and Diego A. Mejía. *On cardinal characteristics of Yorioka ideals.* Math. Log. Q., 65(2):170 199, 2019.

[4] Miguel A. Cardona and Diego A. Mejía. *Localization and anti-localization cardinals.* Kyoto Daigaku Surikaiseki Kenkyusho Kokyuroku, 2261:4777, 2023.