JAN DOBROWOLSKI, Tameness in positive logic. University of Manchester.

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Positive logic is a very flexible framework unifying full first-order logic with several other settings, such as Robinson's logic (which studies existentially closed models of a possibly non-companionable first-order universal theory), hyperimaginary extensions of first-order theories (which are obtained by adding quotients by type-definable equivalence relations), and, in certain aspects, continuous logic.

The study of tameness in those contexts goes back to A. Pillay's work on simple Robinson's theories ([3]), and I. Ben Yaacov's work on simple compact abstract theories ([1]). In the talk, I will present a joint work with M. Kamsma on $NSOP_1$ in positive logic and a joint work in progress with R. Mennuni on NIP in positive logic, discussing in particular the main motivating examples for the two projects: existentially closed exponential fields (studied before by L. Haykazyan and J. Kirby in [2]) and existentially closed ordered abelian groups with an automorphism.

- [1] I. Ben Yaacov. Simplicity in compact abstract theories, Journal of Mathematical Logic, 03(02):163–191, 2003.
- [2] L. Haykazyan, J. Kirby, Existentially closed exponential fields, Israel Journal of Mathematics, 241(1):89–117, 2021.
- [3] A. Pillay. Forking in the Category of Existentially Closed Structures, Quaderni di Matematica, 6:23–42, 2000.

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