

# A History of Non-Standard Approaches

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I am planning to show how, during a few last decades, non-standard research helped us to tackle the issue of constructivism and formalism in new and interesting ways, an issue which, in my opinion, remains the main one in philosophy of mathematics. Various steps and formulations of the non-standard effect will be considered, from Robinson's enlargements to recent work by Sanders and Van den Berg–Briseid–Safarik.

For background, see Peter Fletcher, Karel Hrbacek, Vladimir Kanovei, Mikhail G. Katz, Claude Lobry, and Sam Sanders, 'Approaches to analysis with infinitesimals following Robinson, Nelson, and others', *Real Analysis Exchange* Vol. 42(2), 2017, pp. 193–252.