► ALEXANDER KREUZER, Ramsey's Theorem for pairs and provably recursive functions.

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In this talk, we present a joint work with Ulrich Kohlenbach.

Applying the Elimination of monotone Skolem functions (see [1]), we show that instances of Ramsey's theorem for pairs and a fixed number of colors $n (\text{RT}_n^2(c))$ at most cause provably primitive recursive function(al)s relative to certain weak fragments of analysis, e.g. WKL₀^{*}.

We also comment on ongoing work in a more general setting.

[1] ULRICH KOHLENBACH, Elimination of Skolem functions for monotone formulas in analysis, Archive for Mathematical Logic, vol. 37 (1998) pp. 363-390.

[2] ALEXANDER KREUZER, Ramsey's Theorem for pairs and provably recursive functions, submitted.