Controlled Rough Paths Revisited

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In recent work with Cass, Litterer, and Ferrucci, we developed the theory of "weakly geometric rough paths" via a purely combinatorial approach without the use of smooth approximation. In this talk, I want to indicate how to avoid the explicit combinatorics by using the truncated signatures of smooth curves as "generating functions" for the algebraic identities needed to make the theory work. This is a report on work in progress.