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## Forests, Trees, Words, Letters

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The construction and analysis of some numerical integrators is a surprisingly complicated task. Several decades were necessary before numerical analysts came up with the necessary tools from algebra and combinatorics. Later these tools have found uses in other fields like renormalization in quantum field theory, noncommutative geometry, regularity structures, etc. This is a talk aimed at nonspecialists, where I shall present a historical survey, a summary of the main tools and a sketch of recent developments.

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