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Title: Twisted dendriform algebras and the pre-Lie Magnus expansion

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Categories: math.CO [Combinatorics](#) (math.QA [Quantum Algebra](#))

Comments: improved version

MSC: 16W30; 05C05; 16W25; 17D25; 37C10; 81T15.

Abstract: In this paper an application of the recently introduced pre-Lie Magnus expansion to Jackson's q -integral and q -exponentials is presented. Twisted dendriform algebras, which are the natural algebraic framework for Jackson's q -analogues, are introduced for that purpose. It is shown how the pre-Lie Magnus expansion is used to solve linear q -differential equations. We also briefly outline the theory of linear equations in twisted dendriform algebras.

Pasted from <<http://front.math.ucdavis.edu/0910.2166>>

How much of the theory of associators can be recovered/predicted from the existence of a quasi-homomorphic expansion for the tower of braid groups?

I can no longer learn new things; at best I can aim to fit new things into my existing world-view.

In w -world, is there a "thick tube" opposite to "thin tube" = "1D paths"?