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An exponential map is a power series in one variable that sends the set of primitive elements in a complete Hopf algebra to the set of its group-like elements, and whose linear term has coefficient 1. While the exponential map is unique in the associative setting, in the non-associative case there are infinitely many exponential maps.

In this talk I will describe the set of all non-associative exponential maps as a torsor for a certain residually nilpotent group. I will also talk about the problem of constructing the non-associative version of the Dynkin form of the Baker-Campbell-Hausdorff formula; that is, expressing $\log(\exp(x)\exp(y))$, where x and y are non-associative variables, in terms of the Shestakov-Umirbaev primitive operations.

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