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L-infinity Algebras, Homotopy Transfer and Field Theory (Lecture 2 of 3)

Tuesday, 21 September 2021 14:00 (1 hour)

I give a self-contained introduction into L-infinity algebras, the formulation of classical field theories in terms of these, and the
notion of homotopy transfer. One goal is to make it self-evident that L-infinity structures are the proper algebraic way to encode the data of classical field theories. In other words, any consistent field theory gives rise to an L-infinity algebra. A second goal is to illustrate that homotopy transfer is the algebraic formulation of the field theory procedure to "integrate out" degrees of freedom, which may be auxiliary or physical, pure gauge or not.

Presenter: HOHM, Olaf