

1047-18-106

Lucian Miti Ionescu* (LMJones@ilstu.edu), Mathematics Department, Illinois State University, School Street, Normal, IL 61790-4520. *Deformation Theory as a generalization of Lie Theory.*

Deformation theory is presented as a pair of adjoint functors, analog to Lie Theory: the universal Maurer-Cartan solution of Stasheff-Huebschman playing the role of the exponential, with Kuranishi functor its inverse, as the logarithm. This leads to connections with Connes-Kreimer algebraic renormalization, to be explored. (Received January 22, 2009)