

1132-18-143

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Classical deformation theory is based on the Classical Master Equation (CME), a.k.a. the Maurer-Cartan Equation: $dS + 1/2[S, S] = 0$. Physicists have been using a quantized CME, called the Quantum Master Equation (QME), a.k.a. the Batalin-Vilkovisky (BV) Master Equation: $dS + \hbar\Delta S + 1/2\{S, S\} = 0$. The CME is defined in a differential graded (dg) Lie algebra, whereas the QME is defined in a space $V[[\hbar]]$ of formal power series with values in a dg BV algebra V . One can anticipate a generalization of classical deformation theory arising from the QME, quantum deformation theory. This theory has been emerging with people like K. Costello, Jae-Suk Park, J. Terilla, and T. Tradler making first steps in abstract quantum deformation theory. Main ideas of quantum deformation theory and further steps will be discussed in the talk. (Received July 19, 2017)