

Breaking nonlinear graviton with plabic graphs

Jan Novák^{*1}

¹Department of physics, Technical University of Liberec, Studentská
1402/2, 461 17, Liberec, Czech republic

March 13, 2019

Abstract. Construction of a model of Quantum Gravity, which will be some day in concordance with experiments, is one of the most fascinating tasks which we have in modern theoretical physics. There are common features for all of the approaches to quantum gravity, which were developed so far. We mention the non-locality, background independence, dimensional reduction and problem of dark energy. We introduce the concept of nonlinear graviton and we suggest the mathematical apparatus for this paradigm, which is hidden in part of algebraic geometry connected to plabic graphs. We end with possible experimental evidence for our approach and we pose a list of open questions.

^{*}jan.novak@johnynewman.com