



EINLADUNG

im Rahmen des Seminars für Mathematische Physik

(Joint TU/UV Theory Seminar)

zum Vortrag

von

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über

„Exceptional geometry of supersymmetric AdS vacua“

Abstract:

In this talk, I will show how exceptional field theory can be used to construct 1/2-maximally supersymmetric AdS vacua of 10/11-dimensional supergravity and their consistent truncations. In particular, I will show how to easily recover the class of infinitely-many supersymmetric AdS₇ vacua of massive IIA and AdS₆ vacua of IIB which were recently constructed in the literature. Next, I will show how this framework can be used to immediately obtain the "minimal" consistent truncation around these AdS vacua in which only the gravitational supermultiplet of the lower-dimensional supergravity is kept. Finally, I will classify all possible consistent truncations around these AdS vacua containing additional matter multiplets. I will thus show there are no consistent truncations with vector multiplets for the AdS₇ vacua with Roman's mass and give precise differential conditions for the AdS₆ vacua of IIB to allow consistent truncations vector multiplets

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