Exceptional Geometry of supersymmetric AdS vacua and their consistent truncations

Wednesday 5 June 2019 15:00 (1 hour)

I will show how exceptional field theory (ExFT) can be used to construct supersymmetric AdS vacua of 10-/11-d SUGRA and their consistent truncations. I will focus on the class of infinitely-many supersymmetric AdS_7 vacua of massive IIA and AdS_6 vacua of IIB and show how ExFT immediately leads to the "minimal" consistent truncation around these vacua in which only the gravitational supermultiplet is kept. I will also show that there are no consistent truncations with vector multiplets for the AdS_7 vacua with Roman's mass and give precise differential conditions for the AdS_6 vacua of IIB to allow consistent truncations vector multiplets.

Presenter: MALEK, Emanuel (AEI Potsdam)

Session Classification: Seminar