

Plenarvortrag PV V Do 11:00 ZHG 011
On the Mathematical Structure of Scattering Amplitudes —
•MARCUS SPRADLIN — Brown University, Providence RI, USA

The past several years have seen dramatic progress in our understanding of scattering amplitudes in supersymmetric gauge and gravity theories. Theoretical advances including the discovery of hidden symme-

tries and rich mathematical structure have led also to practical advances which in many cases render previously impossible field theory calculations trivial. I will review these and recent related developments on correlation functions and Wilson loops, including intriguing connections between gauge theory scattering amplitudes and the mathematical theory of motives.