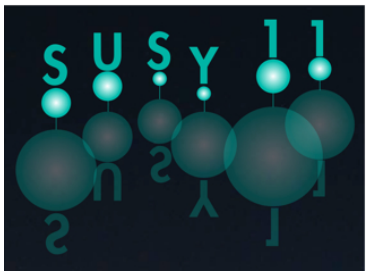

Contribution ID: **329** Type: **not specified**

N = 4 Scattering Amplitudes Calculated to All Orders in the Dimensional Regularization Parameter

Sunday, 28 August 2011 15:35 (20 minutes)

In this talk, new all-orders-in-epsilon results for planar scattering amplitudes in N = 4 super Yang-Mills theory will be presented, both in component form and in N = 4 on shell superspace. The focus will be on the one-loop six-point case because this is where the first non-trivial examples arise. As an application, striking relations between open superstring amplitudes and one-loop N = 4 amplitudes will be discussed. These relations can only be realized if one computes the amplitudes on the N = 4 side to all orders in the dimensional regularization parameter.

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Session Classification: Parallel Session 2