"Scattering amplitudes, bootstrap, and supersymmetric localization"

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Abstract: In this talk, I will connect three topics: supersymmetric localization, bootstrap, and scattering amplitudes in string theory and M-theory. In particular, I will explain how one can rederive the first few terms in the small momentum expansion of string theory and M-theory graviton scattering from CFT results. I will also explain how our knowledge of closed string scattering amplitudes and supersymmetric localization can be combined to give new results for the 4-point function of conformal primary operators in 4d N=4 super-Yang-Mills theory and in ABJM theory at strong coupling.