Institut Henri Poincaré

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String Theory in Greater Paris

Rencontres Théoriciennes

"Supergravité, théorie des cordes et théorie M"

Jeudi 24 Novembre 2022, 10:00

Marco Meineri

EPFL

Bounds on photon scattering

We study 2-to-2 scattering amplitudes of massless spin one particles in four spacetime dimensions, like real world photons. We use full nonlinear unitarity to construct numerical bounds on the Wilson coefficients, which describe these amplitudes at low energies. Some of the bounds can be recovered analytically by using the optical theorem, others cannot. Finally, some Wilson coefficients cannot be bounded, and we discuss why.

Institut Henri Poincaré, salle 314, 3ème étage