

## Recent progress on scattering amplitudes

### 【摘要】

Powerful computational tools and new structures for perturbative scattering amplitudes in QFT have been discovered in recent years. Apart from playing a central role in high-energy particle physics, these developments have important implications for formal QFT, quantum gravity, string theory and even new directions in mathematics. I will review some recent progress, focusing on a new formulation of scattering of gluons, gravitons and their connections, as well as geometries underlying QFT and strings, which may hint at a “theory at infinity” for their S-matrices.

### 【报告人简介】



Song He is a professor at Institute of Theoretical Physics (CAS), who has been working on QFT, string theory and mathematical physics. In recent years his works mainly focus on scattering amplitudes, gauge/gravity dualities and related areas. He has published over 80 papers with about 5000 citations, and was awarded the AAPPs-APCTP C.N. Yang award in 2019.

### 【报告人】

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