



# Sommerfeld Theory Colloquium

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Particle Scattering and Number Theory

From the softest of interactions of a magnetic field with an electron, to the most violent collisions at the Large Hadron Collider, precision quantum field theory produces numbers and functions with interesting number-theoretic properties. In many examples a co-action principle holds, an invariance under a "cosmic" Galois group. I will provide several arenas in which this principle can be seen at work, including perhaps the richest set of theoretical data, scattering amplitudes in planar  $N = 4$  super-Yang-Mills theory.

Wednesday, 29 May 2019, 16:15h, Room A348, Theresienstr. 37/III

Prof. L. Ferro, Prof. D. Lüst