



Sommerfeld Theory Colloquium

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The Remarkable Mathematical Structure of Scattering Amplitudes

Perhaps no area of physics is more notorious for its very difficult and tedious calculations than quantum field theory. Yet such computations are of crucial importance: as we spend billions of euros on high energy particle experiments, it is an embarrassment when data analysis is hampered by the difficulty to carry out what should be "textbook" computations. I will review for a general audience some of the remarkable mathematical insights which have led in the past decade to a revolution in our understanding of scattering amplitudes in quantum field theory, as well as to wizardry which has helped make some previously impossible computations completely trivial.

Wednesday, 18 December 2013, 16:15h, Room A348/349, Theresienstr. 37/III