



Department of  
Theoretical Physics

# THE QUANTUM SPACETIME SEMINAR SERIES

## Kite diagram through Symmetries of Feynman Integrals

**Subhajit Mazumdar**

(The Hebrew University of  
Jerusalem, Israel)

**Date:** Sept. 10, 2018

**Time:** 11.30 am

**Venue:** A-304, TIFR



The Symmetries of Feynman Integrals (SFI) is a method for evaluating Feynman Integrals which exposes a novel continuous group associated with the diagram which depends only on its topology and acts on its parameters. Using this method we study the kite diagram, a two-loop diagram with two external legs, with arbitrary masses and spacetime dimension. Generically, this method reduces a Feynman integral into a line integral over simpler diagrams. We identify a locus in parameter space where the integral further reduces to a mere linear combination of simpler diagrams, thereby maximally generalizing the known massless case.