

SPEAKER: Yoshiaki Goto

TITLE: **Advanced Methods for Scattering Amplitudes: Introduction to Intersection Theory for Twisted Co-Homology Groups**

DATE: 24 Jun 2021, 08:30

PLACE: via zoom

### ABSTRACT

Abstract: This cycle of seminars provides an introduction to a new mathematical method which has been recently understood to be useful for the evaluation of Feynman Integrals and Scattering Amplitudes in Quantum Field Theory, and which makes use of concepts borrowed from Differential Geometry and Algebraic Topology. Outline: - Regularization of Cycles - Twisted Stokes Theorem - Twisted Homology Groups and Intersection Number - Twisted Cohomology Groups and Intersection Numbers - Twisted Period Relations - Appell-Lauricella's hypergeometric functions and Intersection Theory. All seminars will be delivered online, and can be followed from Room 313, Edificio Paolotti.

Organized by

INFN & DFA Prof. P. Mastrolia