

Mathematisches Kolloquium

Mittwoch, 31. Mai 2023 Sky Lounge

EINLADUNG

Fernando Rodriguez Villegas

(Abdus Salam International Centre for Theoretical Physics)

"Motives: a classical perspective"

"Motives: a classical perspective"

Abstract:

Grothendieck introduces the notion of a "motive" in a letter to Serre in 1964. He later described it as the concept "most charged with mystery" and "perhaps the most powerful instrument of discovery" that he had discovered. In this talk we will discuss how this crucial concept in arithmetic geometry relates to classical mathematics. As an illustrative example, we will show how a classical formula of Sonine and Gegenbauer for the integral of the product of Bessel functions has a motivic incarnation. The bulk of the talk will be about the very interesting families of motives connected to the classical hypergeometric series.

14:45 Uhr: Kaffeejause

15:15 Uhr: Vortrag

Vinum cum pane im Anschluss

Anton Mellit José Luis Romero Radu Ioan Boţ