九大代数学セミナー

日時 2024 年 4 月 26 日 (金) 16:00-17:00

場所 九州大学伊都キャンパス ウエスト 1 号館 5 階 C-513 中講義室, および Zoom ミーティングによるオンライン開催

* * *

講演者 Kang Zuo 氏 (Wuhan University)

題目 p-adic Simpson correspondence, motivic Higgs bundles and Katz convolution.

概要 I shall explain our recent work, jointly with Jinbang Yang, on constructing rank-2 motivic local systems on 4-punctures projective line over complex numbers. The proof relies on non-abelian p-adic Hodge theory, p-adic Simpson correspondence for periodic Higgs bundles, Deligne's p to ℓ companions, Yu's work on numerical characteristic p Simpson correspondence, Drinfeld's work on Langlands correspondence for rank-2 ℓ -adic local systems with cusps and Grothendieck-Messing-Kato deformation theorem for log abelian schemes. It is remarkable that recently Lam-Litt provided a totally different approach to the above results using Katz middle convolution.

* * *

世話人:小林 真一, Ade Irma Suriajaya, 松坂 俊輝, 佐藤 謙太 (九大数理)