

数理物理セミナーのお知らせ

2024年2月15日(木) 15:00–16:30

理学部1号館3階321セミナー室 (Zoom 配信あり)

Speaker : Yehao Zhou (Kavli IPMU)

Title: Revisiting type A deformed double current algebras, affine Yangians, rectangular W-algebras, and their coproducts

Abstract: In this talk I will discuss a new presentation of deformed double current algebra of type gl_k , denoted by $A^{(k)}$. I will explain how to find an algebra embedding from $A^{(k)}$ to the mode algebra of $W_\infty^{(k)}$, which is a matrix-extended generalization of $W_{1+\infty}$ algebra. $A^{(k)}$ can be "doubled" to get an algebra $Y^{(k)}$. When k is not 2, we can show that $Y^{(k)}$ is isomorphic to affine Yangian of type A_{k-1} . Conjecturally, such isomorphism also holds for $k = 2$. I will also discuss various coproducts of these algebras along the way. This talk is based on the joint work with Davide Gaiotto and Miroslav Rapcak (arXiv:2309.16929).

問合せ先：小寺諒介

kodera@math.s.chiba-u.ac.jp