Announcement

Seminar on Deformation Quantization

9. 6. 2023 at 2pm CEST

Seminarroom SE 30

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Computing the single-valued Knizhnik-Zamolodchikov associator

We consider the formula for the single-valued KZ-associator introduced by Rossi and Willwacher. First, we introduce multiple zeta values and Drinfel'd associators. Then, we show that single-valued integration is well suited for calculating the single-valued KZ-associator by example of integrating the wheel graph. On the other hand we see that by comparing coefficients this associator can also be recovered from the KZ and anti-KZ associator. Then we turn to graph complexes and introduce Kontsevichs graph complex as well as show the isomorphism from $H_0(GC)$ to $\mathfrak{grt}_1$ introduced by Willwacher. Finally by combining all the above we can give full descriptions of the single-valued KZ-associator up to weight 13 as well as generators of $\mathfrak{grt}_1$ up to weight 7.

Invited by Stefan Waldmann