Crystals and coboundary categories. (English summary)


Summary: “Following an idea of A. Berenstein, we define a commutor for the category of crystals of a finite-dimensional complex reductive Lie algebra. We show that this endows the category of crystals with the structure of a coboundary category. Similarly to the role of the braid group in braided categories, a group naturally acts on multiple tensor products in coboundary categories. We call this group the cactus group and identify it as the fundamental group of the moduli space of marked, real, genus-zero stable curves.”

References

9. ———, A monoidal category built using the octahedron recurrence, in preparation. 193


Note: This list, extracted from the PDF form of the original paper, may contain data conversion errors, almost all limited to the mathematical expressions.

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