

# DEFENSE OF THE DOCTORAL DISSERTATION

DEPARTMENT OF MATHEMATICS

“Multiple generalized cluster structures on  $D(\mathrm{GL}_n)$ ”

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Thursday, May 26, 2022

Time: 2:00 PM

Location: 258 Hurley Bldg

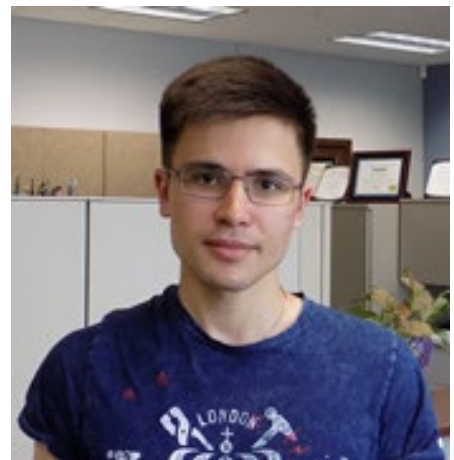
Examination Committee:

Misha Gekhtman, Advisor

Kurt Trampel

Sam Evens

Pavel Mnev



Abstract:

We produce a large class of generalized cluster structures on the Drinfeld double of  $\mathrm{GL}_n$  that are compatible with Poisson brackets given by Belavin-Drinfeld classification. The resulting construction is compatible with the previous results on cluster structures on  $\mathrm{GL}_n$  and is a part of the research program led by Misha Gekhtman, Misha Shapiro and Alek Vainshtein on the existence of generalized cluster structures on simple Poisson-Lie groups, their Poisson duals and their Drinfeld doubles.