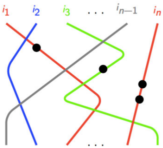


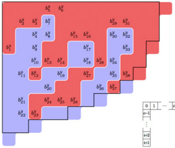

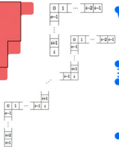

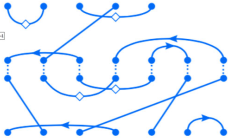

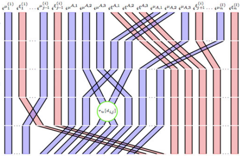

Robert Muth
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Categorical/combinatorial representation theory

- Field $\Bbbk$, char $\Bbbk = p > 0$. Kac-Moody Lie algebra $\mathfrak{g} = \hat{\mathfrak{sl}}_p$.

| KLR algebra | Quantum group |
|---|---|
| $R_\alpha$ | $\mathcal{U}_q^+(\mathfrak{g})$ |

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KLR algebra $\bigoplus_{\alpha \in Q_+} R_\alpha\text{-mod}$ $\overset{\text{Grothendieck group}}{\rightsquigarrow}$ Quantum group $\mathcal{U}_q^+(\mathfrak{g})$

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$$\begin{array}{ccc} \text{KLR algebra} & & \text{Quantum group} \\ \bigoplus_{\alpha \in Q_+} R_\alpha\text{-mod} & \xrightarrow{\text{Grothendieck group}} & \mathcal{U}_q^+(\mathfrak{g}) \end{array}$$

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- Generalized Schur superalgebras $T^A(n, d)$ for quasihereditary $A$...