



MANHATTAN ALGEBRA DAY

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A Lie group analog for the Monster Lie algebra

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Abstract:

The Monster Lie algebra \mathfrak{m} , which admits an action of the Monster finite simple group M , was constructed by Borcherds as part of his program to solve the Conway–Norton conjecture about the representation theory of M . We associate the analog of a Lie group $G(\mathfrak{m})$ to the Monster Lie algebra \mathfrak{m} . We give generators for large free subgroups and we describe relations in $G(\mathfrak{m})$.