

# Monodromy groups of conformal field theory

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Abstract:

There is an action of the mapping class groups on the space of the conformal blocks for Riemann surfaces defined by monodromy. We give a qualitative estimate for the images of such representations of mapping class groups. In particular, we show that the image of any Johnson subgroup contains a non-abelian free group. In the case of braid groups we describe the monodromy group in relation with triangle groups. Based on the estimate of the monodromy groups we give an answer to conjectures by Squier on Burau representations of braid groups. This is a joint work with Louis Funar.