

Mathieu Moonshine and Siegel Modular Forms [†]

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Abstract: A second-quantized version of Mathieu moonshine leads to product formulae for functions that are potentially genus-two Siegel Modular Forms analogous to the Igusa Cusp Form. The modularity of these functions does not follow in an obvious manner. For some conjugacy classes, but not all, they match known modular forms. This talk discusses the product formulae for all conjugacy classes of M_{24} in terms of products of standard modular forms. This provides new proof of their modularity.

Keywords: Mathieu moonshine; Igusa Cusp form.

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Conflicts of Interest

The authors declare no conflict of interest.