

Taking the Limit: Quantum Modular Forms in Moonshine, Physics and Topology

Thursday, 3 June 2021 21:00 (1h 15m)

Often it is useful to study the “boundary condition”, namely the behaviour near the cusps, of functions on the upper-half plane. This leads naturally to the concept of quantum modular forms, which are functions on rational numbers that have rather mysterious weak modular properties generalizing modular forms and mock modular forms. In this talk I will discuss how considerations of boundary conditions lead to interesting application of quantum modular forms in the inter-connected subjects of moonshine, physics and topology.

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