

An intriguing and almost completely unsolved problem is to understand the overlap between classes of q -hypergeometric series and automorphic forms. For example, we now know that each of Ramanujan's mock theta functions is the holomorphic part of a weak Maass form. In this talk, we provide a framework which generalizes recent work of Andrews and discuss automorphic properties of the associated q -hypergeometric series. This is joint work with Kathrin Bringmann and Jeremy Lovejoy.