

1125-11-1118 **Nickolas Andersen*** (nandersen@math.ucla.edu). *The mock theta conjectures.*

The mock theta conjectures are two families of identities from Ramanujan's Lost Notebook involving the fifth order mock theta functions. These identities were first proven by Hickerson (Inventiones 1988) using Hecke-type q -series identities discovered by Andrews. We prove an equality between two vector-valued harmonic Maass forms of weight $1/2$ which encodes these identities, thus providing a simple, conceptual proof of the mock theta conjectures. (Received September 14, 2016)