

1106-11-852 **Michael H. Mertens*** (mmertens@math.uni-koeln.de). *Holomorphic Projection and Mock Modular Forms.*

We give survey about a specific tool in the theory of harmonic Maass forms and mock modular forms, *holomorphic projection*. We describe how to use it to

- a) construct examples of mock modular forms
- b) prove Eichler-Selberg-type recurrences for Fourier coefficients of mock theta functions
- c) establish a connection between mock modular forms and a certain kind of L -functions.

Parts of this talk are based on joint work with Ken Ono. (Received September 08, 2014)