1046-11-1175   **Pavel Guerzhoy*** (`pavel@math.hawaii.edu`), Department of Mathematics, University of Hawaii at Manoa, 2565 McCarthy Mall, Keller 401A, Honolulu, HI 96822. *Holomorphic parts of weak harmonic Maass forms and Eichler cohomology.*

I will discuss a way to define holomorphic parts of weak harmonic Maass forms in terms of Eichler cohomology. In this way, one avoids working with Maass forms, and introduces periods of weakly holomorphic modular forms instead. A generalization of Haberland's identity, a connection to the algebraicity of the Fourier coefficients, and some congruences will be presented. (Received September 15, 2008)