A. Pantano, A. Paul and S. A. Salamanca-Riba* (ssalaman@nmsu.edu), Mathematical Sciences Department, MSC 3MB, New Mexico State University, Las Cruces, NM 88003. On the omega-regular unitary dual of the Metaplectic group. Preliminary report.

In this talk we will discuss the unitary representations of the Metaplectic group \( G = Mp(2n,\mathbb{R}) \) with infinitesimal character at least as regular as that of the oscillator representation of \( G \). We call these representations omega-regular. These are generalizations of strongly regular representations whose infinitesimal character is at least as regular as that of the trivial representation. We will exhibit a list of representations which conjecturally classify these representations. We indicate how this conjecture is true for the case rank = 2 and 3 and how some parts of the argument are true for general rank. (Received September 19, 2007)