

ALGEBRA AND NUMBER THEORY  
SEMINAR

*Almost harmonic Maass forms and Kac-Wakimoto characters*

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We address a question of Kac, and explain the modular properties of certain characters due to Kac and Wakimoto pertaining to  $sl(m|n)^{\wedge}$ , where  $n$  is a positive integer. We prove that these characters are essentially holomorphic parts of new automorphic objects we call "almost harmonic Maass forms," which generalize both weak Maass forms and almost holomorphic modular forms. By new methods involving meromorphic Jacobi forms, this generalizes prior works of Bringmann-Ono and Bringmann-Folsom, which treat only the case  $n=1$ . This is joint work with Kathrin Bringmann (University of Cologne).

Wednesday, September 19, 2012, 3:00 pm  
Mathematics and Science Center: W306

MATHEMATICS AND COMPUTER SCIENCE  
EMORY UNIVERSITY