

1035-11-878

Ravi Ramakrishna* (ravi@math.cornell.edu), Math Department, Cornell University, Ithaca, NY 14853-4201. *Congruences between modular forms and ranks of new parts of completed Hecke rings.*

Let f be an eigenform of level N . Consider the mod p representation associated to f . Ribet has given a criterion for when there exists a newform g of level Nl congruent to $f \pmod{p}$ where l is a prime. We investigate the ranks of ‘new at M ’ completed Hecke ring whose p -adic points correspond to level NM eigenforms that are new at M and congruent to $f \pmod{p}$. (Received September 17, 2007)