1056-11-1363   **Riad Masri*** (`masri@math.wisc.edu`), University of Wisconsin, Department of Mathematics, 480 Lincoln Drive, Madison, WI 53706, and **Tonghai Yang**. *Nonvanishing of canonical Hecke L-functions for CM number fields.*

In the early 1980's, Rohrlich defined a class of "canonical" Hecke characters of CM number fields. These characters are associated to CM abelian varieties with some nice arithmetic properties. In this talk, I will discuss some results on the nonvanishing of canonical Hecke L-functions and their application to ranks of abelian varieties. This is joint work with Tonghai Yang. (Received September 21, 2009)