1056-11-1067 **W Duke*** (wdduke@ucla.edu), Dept of Math, UCLA, Los Angeles, CA 90024, and **O Imamoglu** and **A Toth**. Real quadratic analogues of traces of singular moduli.

Classical singular moduli are special values of the modular j-function at imaginary quadratic irrationalities and have well known importance for class field theory. I will describe some recent work with O. Imamoglu and A. Toth on certain real quadratic analogues of traces of singular moduli and their relation to mock modular forms. (Received September 20, 2009)