1064-22-153   **GOPAL PRASAD*** (`gprasad@umich.edu`), Department of Mathematics, University of
Michigan, Ann Arbor, MI 48109. *Weakly commensurable arithmetic groups and isospectral locally
symmetric spaces.*

I will speak on the recent joint work with Andrei S. Rapinchuk (a part of which has appeared in Publ.Math.IHES,
#109(2009)) in which we have introduced the notion of weak commensurability of arithmetic (and, more generally, of
Zariski-dense) subgroups of semi-simple Lie groups, and investigated when weak commensurability of arithmetic groups
implies their commensurability. We apply our results to investigate isospectral and length commensurable locally sym-
metric spaces of simple Lie groups. (Received September 06, 2010)