

1106-11-2517      **Bir B Kafle\*** (bkafle@pnc.edu), 1401 S. US 421, SWRZ 310, Westville, IN 46391, and **Robert V Perlis**. *Local Conjugation in Groups and Applications to Number Fields*. Preliminary report.

Let  $G$  be a finite group. Two subgroups  $H, H'$  of  $G$  are said to be Gassmann equivalent if each conjugacy class of  $G$  intersects  $H$  and  $H'$  in the same number of elements. In 1192, Sheng Chen proved that  $H, H'$  are Gassmann equivalent if and only if  $H, H'$  are locally conjugate. Many applications of local conjugacy have been discovered. In this talk, I will discuss the local conjugacy in symmetric groups, a new reformulation of Gassmann equivalence and its application to number fields. (Received September 16, 2014)