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)