1086-20-1941   **Elizabeth Wilcox*** (`ewilcox@colgate.edu`). *The Chermak-Delgado Lattice of a Finite Group.*

Let G be a finite group with H a subgroup of G. The Chermak-Delgado measure of H in G is $|H||C_G(H)|$. The collection of all subgroups with maximum Chermak-Delgado measure forms a lattice, referred to as the Chermak-Delgado lattice of G. This idea was introduced in 1989 by A. Chermak and A. Delgado in the context of finite simple groups, but was reintroduced by I. Martin Isaacs in his recent group theory textbook.

Despite its straightforward definition, the subgroups in the Chermak-Delgado lattice obey some surprising properties. For example, the members of this lattice are all subnormal in G. However, a group of order 32 presents the first example of a subgroup in the Chermak-Delgado lattice that is subnormal but not normal.

This talk will discuss recent efforts to describe the Chermak-Delgado lattice of various kinds of products of groups in terms of the factors, as well as efforts to understand the relationship between the Chermak-Delgado lattice and the structure of p-groups. (Received September 24, 2012)