1134-20-437 Shawn T Burkett* (shawn.burkett@colorado.edu). Lattices of normal subgroups and supercharacter theory.

A supercharacter theory of a finite group is an approximation of its character theory where the role of the irreducible characters is played by a certain set of characters, called supercharacters, which enjoy some similar algebraic properties. Given a supercharacter theory of G, a lattice of normal subgroups of G can be associated via the kernels of the supercharacters. Conversely, given any lattice \mathcal{L} of normal subgroups of G, a supercharacter theory of G can be constructed whose associated lattice is \mathcal{L} and which is as course as possible, in some sense. In this talk, we will discuss some properties of these lattices, as well as the possibility of constructing finer supercharacter theories from a lattice of normal subgroups by specifying supercharacter theories on each covering relation. (Received September 12, 2017)