1108-20-257 C B Sass* (sass@txstate.edu), San Marcos, TX 78666. Character Degree Graphs of Finite Solvable Groups with Diameter three.

Let G be a finite solvable group and cd(G) the set of character degrees of G. The character degree graph $\Delta(G)$ is the graph whose vertices, $\rho(G)$, are the primes dividing the degrees in cd(G) and there is an edge between two distinct primes p and q if their product pq divides some degree in cd(G). By Pálfy's Condition, we know that the diameter of a connected character degree graph is at most three for a connected graph. We will present the history on the character degree graphs of solvable groups with diameter three, and present some of the recent results. (Received January 15, 2015)