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William T. Trotter and **Ruidong Wang*** (rwang49@math.gatech.edu), School of Mathematics, 686 Cherry Street, Atlanta, GA 30332. *Incidence Posets and Cover Graphs*.

We prove two theorems concerning incidence posets of graphs, cover graphs of posets and a related graph parameter. First, answering a question of Haxell, we show that the chromatic number of a graph is not bounded in terms of the dimension of its incidence poset, provided the dimension is at least four. Second, answering a question of Kříž and Nešetřil, we show that there are graphs with large girth and large chromatic number among the class of graphs having eye parameter at most two. (Received August 08, 2013)