1011-05-195 Maria Axenovich\* (axenovic@iastate.edu), 396 Carver Hall, Ames, IA 50011, and Jozsef Balogh, 1409 W.Green Str., Urbana, IL 61801. On graphs with few nonisomorphic induced subgraphs. Preliminary report.

Let G be a graph on n vertices, k, l are integers such that 2l < k < n - 2l, n is large enough. Let

 $\nu_k(G) = |\{|E(H)| : H \text{ an induced subgraph of } G \text{ on } k \text{ vertices}\}|.$ 

We show that if  $\nu_k(G) = l$  then there is a function f(l) such that G has a complete or an empty subgraph on at least n - f(l) vertices. This extends the results of Bollobás et al. on structure of graphs with small number of nonisomorphic induced subgraphs. (Received August 26, 2005)