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Raluca Gera* (rgera@nps.edu), Department of Applied Mathematics, 1 University Way, Monterey, CA 93943, and **Craig Larson, Ryan Pepper** and **Craig Rasmussen**. *Independence in Function Graphs*.

Given two graphs G and H and a function $f \subset V(G) \times V(H)$, Hedetniemi defined the *function graph* GfH by $V(GfH) = V(G) \cup V(H)$ and $E(GfH) = E(G) \cup E(H) \cup \{uv \mid v = f(u)\}$. Whenever $G \cong H$, the function graph was called a *functigraph* by Chen, Ferrero, Gera and Yi. A function graph is a generalization of the α -*permutation graph* introduced by Chartrand and Harary. The independence number of a graph is the size of a largest set of mutually non-adjacent vertices. In this talk we study the independence number in function graphs. In particular, we give a lower bound in terms of the order and the chromatic number, which improves on some elementary results and has a number of interesting corollaries. (Received August 22, 2013)