1047-05-126 **Jennifer Vandenbussche*** (jvandenb@spsu.edu), Southern Polytechnic State University, Department of Mathematics, 1100 S. Marietta Pkwy, Marietta, GA 30060, and **Douglas B. West**, University of Illinois at Urbana-Champaign. *Independence number of 2-factor-plus-triangles graphs.*

A *2-factor-plus-triangles graph* is the union of two 2-regular graphs G_1 and G_2 with the same vertices, such that G_2 consists of disjoint triangles. Let $\mathcal{G}$ be the family of such graphs. These include the famous "cycle-plus-triangles" graphs shown to be 3-choosable by Fleischner and Stiebitz. In this talk, we explore the independence ratio of graphs in $\mathcal{G}$. The independence ratio of a graph in $\mathcal{G}$ may be less than 1/3, but achieving the minimum value 1/4 requires each component to be isomorphic to a single 12-vertex graph. We present constructions to show that (1) $\mathcal{G}$ contains infinitely many connected graphs with independence ratio less than 4/15; and (2) for each odd g there are infinitely many connected graphs in $\mathcal{G}$ such that G_1 has girth g and the independence ratio of G is less than 1/3. (Received January 23, 2009)