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Boštjan Brešar, Sandi Klavžar, Douglas F Rall* (doug.rall@furman.edu) and **Kirsti Wash.** *Packing Colorings of Graphs.*

If $S = (s_1, s_2, \dots, s_r)$ is a non-decreasing sequence of positive integers, then an S -packing coloring of a graph G is a partition (V_1, V_2, \dots, V_r) of the vertex set of G such that the distance in G between each pair of distinct vertices from V_i is at least $s_i + 1$. The smallest k such that G has a $(1, 2, \dots, k)$ -packing coloring is the packing chromatic number of G . The packing chromatic number was introduced by Goddard et al. in [W. Goddard, S.M. Hedetniemi, S.T. Hedetniemi, J. Harris and D.F. Rall, *Broadcast chromatic numbers of graphs*, *Ars Combin.* **86** (2008) 33-49.] under the name broadcast chromatic number. Since that time a number of papers on the packing chromatic number have been published - in particular, concerning its value on trees, subcubic graphs, various lattices and other infinite graphs.

In this talk we survey some of what has been done on the packing chromatic number and report on some recent work regarding the packing chromatic number of the subdivision of subcubic graphs as well as relationships between the packing chromatic number, the chromatic number and the clique number of a graph. (Received January 11, 2018)