1147-57-890 Patricia Cahn* (pcahn@smith.edu) and Alexandra Kjuchukova. Colored Tri-Plane Diagrams and the Dihedral Genus of a Knot.

Let K be a Fox p-colored knot. We introduce a diagrammatic method for representing a surface in the 4-ball with boundary K, over which the Fox p-coloring of K extends. We use this construction to study what we call the p-dihedral 4-genus of K. We construct a family of knots for which the p-dihedral 4-genus and ordinary 4-genus of K are equal, and discuss applications to the Slice-Ribbon Conjecture. (Received January 29, 2019)