1041-51-130 Daniel Pellicer and Asia Ivić Weiss* (weiss@yorku.ca), Department of Mathematics and Statistics, York University, 4700 Keele St., Toronto, Ontario M3J 1P3, Canada. Combinatorial structure of Schulte's chiral polyhedra. Preliminary report.

Schulte proved that discrete chiral polyhedra in Euclidean 3-space belong to six families. The polyhedra in three of the families have finite faces and the other three families consist of polyhedra with (infinite) helical faces. We show that all the polyhedra with finite faces are combinatorially chiral. However, the polyhedra with helical faces are combinatorially regular. Moreover, any two polyhedra with helical faces in the same family are isomorphic. (Received August 08, 2008)