

1065-51-102

Egon Schulte* (schulte@neu.edu), Northeastern University, Department of Mathematics,
Boston, MA 02115. *Regular Polyhedra of Index Two in Space.*

A polyhedron in Euclidean 3-space is said to be a regular polyhedron of index 2 if it is combinatorially regular but "fails geometric regularity by a factor of 2"; that is, its combinatorial automorphism group is flag-transitive but its geometric symmetry group has two flag orbits. We report on the complete classification of the regular polyhedra of index 2. This is joint work with Anthony Cutler and is described in his 2009 PhD thesis at Northeastern University. (Received September 06, 2010)