Classifying Spacial Triangulations under Symmetry

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A spacial triangulation of a polyhedron is a decomposition into tetrahedra whose vertices are chosen from the vertices of the polyhedron. We consider the problem of constructing such triangulations and classifying them under the symmetry group of the polyhedron. For the classification, we employ a poset-based algorithm. Interesting cases are those of the Platonic and Archimedian solids.

Keywords: Spacial Triangulation, Polyhedra, Classification