

An Euler cover $\varphi: M \to \Delta_5^2$ of the 2-skeleton of the 5-dimensional simplex Δ_5 , which has six vertices 1, 2, 3, 4, 5, 6, fifteen edges and twenty triangular faces. The pseudomanifold M has six vertices, thirty edges and twenty triangular

faces (including the unbounded face in this planar drawing). Vertices with the

same labels are identified, so M is a sphere with six pinchpoints. Note that the three shaded areas of M map to three pairwise face-disjoint tetrahedron boundaries in K. The white triangles (including the unbounded region) map to the boundary of an octahedron in K. This decomposes K as a face-disjoint

union of four spheres (circlets).