

1048-51-7

**Ana Maria Breda\*** ([ambreda@ua.pt](mailto:ambreda@ua.pt)), Departamento de Matematica, Universidade de Aveiro, Campus de Santiago, Aveiro, Portugal, and **Patrica Ribeiro** ([pribeiro@est.ips.pt](mailto:pribeiro@est.ips.pt)), Campus do IPS, Estefanilha, Setubal, Portugal. *Spherical dihedral f-triangulations.*

The theory of isometric foldings (maps of Riemannian manifolds sending piecewise geodesics to piecewise geodesics of the same length) was initiated by S. Robertson in 1977. An isometric folding is a continuous locally isometry which is not necessarily differentiable. The points where it fails to be differentiable is said to be singular. Robertson has shown that the singularity set of isometric foldings on surfaces are embedded graphs (f-tilings) of even valency satisfying the angle relation, that is, at each vertex, the alternate angle sums are both equal to  $\pi$ . Here we present the algebraic and combinatorial structure of a class of dihedral f-triangulations of the Riemannian sphere (Received October 03, 2008)