Section 04: Differential Geometry

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Cohomogeneity One Revolution Hypersurfaces of the Sphere

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ABSTRACT_

We study some non negatively curved hypersurfaces of the (n+1)-sphere, acted on by a compact Lie subgroup of its intrinsic isometries with principal orbits of codimension one. We prove that these hypersurfaces are revolution hypersurfaces if and only if all regular orbits are totally umbilic.

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