

Nonplanar minimal spheres in ellipsoids of revolution

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Abstract. We use global bifurcation techniques to establish the existence of arbitrarily many geometrically distinct nonplanar embedded smooth minimal 2-spheres in sufficiently elongated 3-dimensional ellipsoids of revolution. More precisely, we quantify the growth rate of the number of such minimal spheres, and describe their asymptotic behavior as the ellipsoids converge to a cylinder.

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