

1135-58-2944

John D Ross* (rossjo@southwestern.edu), SU Box 7371, 1001 E. University Avenue,
Georgetown, TX 78626. *On the Existence of a Closed, Embedded, Rotational
Lambda-Hypersurface.*

In this paper we show the existence of a closed, embedded λ -hypersurface $\Sigma \subset \mathbb{R}^{2n}$. The hypersurface is diffeomorphic to $\mathbb{S}^{n-1} \times \mathbb{S}^{n-1} \times \mathbb{S}^1$ and exhibits $SO(n) \times SO(n)$ symmetry. Our approach uses a shooting method similar to the approach used by McGrath in constructing a generalized self-shrinking torus solution to mean curvature flow. The result generalizes the λ -torus found by Cheng and Wei. (Received September 26, 2017)