

Title: The cut locus of a Randers rotational 2-sphere of revolution

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In the present paper, we study the structure of the cut locus of a Randers rotational 2-sphere of revolution $(M, F = \alpha + \beta)$. We show that in the case when the Gaussian curvature of the Randers surface is monotone along a meridian, the cut locus of a point $q \in M$ is a point on a subarc of the opposite half bending meridian or of the antipodal parallel (Theorem 1.1). More generally, in the case when the Gaussian curvature is not monotone along the meridian, but the cut locus of a point q on the equator is a subarc of the same equator, the cut locus of any point $\tilde{q} \in M$ different from poles is a subarc of the antipodal parallel (Theorem 1.2). Some examples are also given in the last section and some differences with the Riemannian case are pointed out.

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