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Alexander Diaz* (alexander.diaz1@upr.edu), Urb. Estancias del Bosque, 363 Calle Nogales G7, Cidra, PR 00739, and **Nate Harman, Sean Howe** and **David Thompson**. *The Isoperimetric Problem in Sectors with Disk Density*.

A manifold with density is a manifold with a positive function weighting both perimeter and area. I consider the isoperimetric problem in planar sectors with density a inside the unit disk and density 1 outside. There are ten types of solutions, depending on a , the sector angle, and the prescribed area. Another interesting feature of this problem is that it deals with a noncontinuous density.

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