

**Title: A study on soap films between two coaxial circles in parallel planes at a fixed distance**

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Abstract:

This talk is appropriate for graduate students, as it contains a brief introduction to minimal surfaces along with some new results.

We present a study of doubly connected minimal surfaces bounded by two coaxial circles with arbitrary radii that lie in parallel planes located at a given distance. We present an algorithm to find the catenoidal solutions when the distance between planes is fixed, based on the sum of radii of the two circles. Moreover, we present some numerical results generated by the proposed algorithm.