

Advanced Topics in Geometry E (MTH.B501)

Beltrami's pseudosphere

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2022/06/07

Exercise 6-1

Problem (Ex. 6-1)

Find an explicit solution of (6.5) for $e = 1$, with initial condition $\varphi(0) = 0$, $\dot{\varphi}(0) = 2$.

Exercise 6-2

Problem (Ex. 6-2)

For a constant $e \in (0, 1)$, the solution φ of (6.5) with (6.6) is a periodic function. Find the period of such a solution.