

An acentric rotation of two helical vortices of the same circulations - DTU Orbit (09/11/2017)

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The aim of this paper is to test the possibility of a secondary solution of the acentric rotation of helical vortex pairs with the same pitch, sign and strength. The investigation addresses the three-dimensional vortex dynamics of thin vortex filaments. As a result of the current investigation, this secondary solution with acentric vortex positions in the helical pairs is found. This fact was not discussed in previous studies, and the existence of the new equilibrium solution for the helical vortex pairs is an original result.

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