Vortex dynamics on non-orientable manifolds

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Vortex systems on orientable manifolds are a well-studied topic. However, vortex motion can exist and be described for non-orientable cases as well.

In this talk, we will discuss Hamiltonian-type equations of vortex motion on the Moebius band. Writing them explicitly requires taking a second look at some notions of hydrodynamics. Additionally, we will investigate in detail the motion of small numbers of vortices.