

Von Karman vortex streets and solitons

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Von Karman vortex streets are the simplest (and probably the most important for applications) periodic relative equilibria in vortex dynamics found in 1911.

I will show that they are simply related to the famous soliton solutions, which are travelling wave solutions of the shallow water Korteweg de Vries equation discovered in 1895. This will allow us to find new periodic relative vortex equilibria using the modern soliton theory.