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Willie W.Y. Wong* (wongwwy@member.ams.org). *Linear stability of the catenoid under the VMC flow outside of symmetry.*

In a previous joint work with DONNINGER, KRIEGER, and SZEFTTEL, the author studied the stability of the catenoid under the vanishing mean curvature flow in Minkowski space, under the assumption that the perturbations exhibit both a reflection symmetry and an axial symmetry. Under these symmetry assumptions we showed that the only linear instability mechanism is the presence of a negative potential in the linearized dynamics driving a one-dimensional exponential instability; we were further able to upgrade this to a co-dimension 1 *nonlinear stability* statement.

In this talk, based on joint work of the author and SZEFTTEL, we analyze the situation for the linearized dynamics outside of the axial symmetry class. More precisely, we prove uniform dispersive decay of higher angular momentum perturbations, using a modification of the methods introduced by BLUE and STERBENZ. (Received July 24, 2017)