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Daniel A Cristofaro-Gardiner* (dcristof@ucsc.edu), **Michael Hutchings** and **Daniel Pomerleano**. *Two or infinity*.

I will present recent joint work showing that for any nondegenerate contact form on a closed three-manifold, the associated Reeb vector field has either two or infinitely many distinct embedded closed orbits as long as the associated contact structure has torsion Chern class. A key ingredient in the proof is an identity relating the lengths of certain sets of Reeb orbits to the volume of the three-manifold. (Received July 26, 2017)