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Shaoyun Bai and **Mohan Swaminathan*** (mohans@math.princeton.edu). *Towards an extension of Taubes' Gromov invariant to symplectic Calabi-Yau 3-folds.*

We will describe the construction of a virtual count of embedded pseudo-holomorphic curves of a given genus in a Calabi-Yau 3-fold lying in two times a primitive homology class. The result is an integer-valued symplectic invariant which can be viewed as a partial extension of Taubes' Gromov invariant to dimension 6. The proof is based on a detailed bifurcation analysis of moduli spaces of embedded pseudo-holomorphic curves and is partly motivated by Wendl's solution to the generic super-rigidity conjecture. (Received December 16, 2021)