

Abstract Submitted
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Two-dimensional SYM theory with fundamental mass and Chern-Simons terms¹ UWE TRITTMANN, Otterbein College — We show that a vacuum expectation value (VEV) of the perpendicular gauge boson in three dimensional supersymmetric Yang-Mills theory generates mass terms for the fundamental fields in its two-dimensional counterpart without destroying supersymmetry. An effective mass for the adjoint particles is provided by an additional Chern-Simons (CS) term. The spectrum of bound-states of the two-dimensional theory is studied as a function of the VEV and the CS coupling. It separates into (almost) massless and very heavy states as the couplings grow. We present structure functions and other properties of some of these states.

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