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Austin D Riedl, Hengzhou Liu and **Dylan J Magnani*** (magnandj@uwec.edu), Dylan Magnani, Mathematics Department, University of Wisconsin-Eau Claire, Eau Claire, WI 54702-4004, and **Chris A Magyar**. *The Moduli Space of Complex 1|3-dimensional algebras.*

Examples of \mathbb{Z}_2 -graded associative algebras naturally arise in topology and physics, but finite dimensional examples are not well studied. The Fundamental Theorem of Finite Dimensional Algebras allows one to construct algebras as extensions of simple algebras by nilpotent algebras, using Wedderburn's Theorem which classifies the simple algebras, and knowledge of lower dimensional nilpotent algebras. These theorems have been extended to the case of \mathbb{Z}_2 -graded algebras. We constructed the moduli space of 1|3-dimensional complex associative algebras using this approach, and also determined the versal deformations of these algebras, leading to a stratification of the moduli space by projective orbifolds, which verifies a conjecture of Fialowski-Penkava for this moduli space. (Received September 22, 2015)