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**Sebastian Bozlee\*** (sebastian.bozlee@tufts.edu), **Adrian Neff** (adrian.neff@colorado.edu) and **Bob Kuo** (bob.kuo@colorado.edu). *A classification of modular compactifications of the moduli space of pointed elliptic curves.*

We will present a classification of modular compactifications  $\mathcal{M}$  of the space  $\mathcal{M}_{1,n}$  of smooth  $n$ -pointed curves of genus one under the condition that the points of  $\mathcal{M}$  represent Gorenstein curves with distinct smooth markings. We uncover new moduli spaces  $\overline{\mathcal{M}}_{1,n}(Q)$ , which we may think of coming from an enrichment of the notion of level used to define Smyth's  $m$ -stable spaces. Time permitting, we will sketch the tropical techniques that identified these new spaces and our method of classification. (Received December 28, 2021)