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From pointed curves to computational linguistics

Abstract The Deligne-Grothendieck-Knudsen-Mumford moduli spaces $M_{g,n}$ of stable pointed curves of fixed genus are deep objects of central importance in geometry and physics. The case of genus zero, in particular, arises in the study of Mac Lane's coherence theorem, the Knizhnik-Zamolodchikov equations, and spaces of trees. I will describe these connections and report on ongoing work on applications to computational linguistics.