

MODULI OF WEIGHTED MARKED CURVES OF GENUS ZERO

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ABSTRACT

A moduli space is a geometric space whose points are solutions to geometric problems. In this talk, I will introduce the moduli of curves with n marked points on \mathbb{P}^1 , which is denoted by $M_{0,n}$. For $n \geq 3$, the moduli space $M_{0,n}$ is not compact. We can compactify the space by adding new points, and this moduli space is denoted by $\overline{M}_{0,n}$. The new points that are added parametrize n -pointed stable curves with weight data \mathcal{A} , and these curves can be represented combinatorially by trees of projective lines. A curve that is not stable can be stabilized by either contracting its components or blowing up its marked points, and I will explain examples involving each of these cases.