String-Math 2016, Collège de France, Paris



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## Moduli spaces of curves with non-special divisors

Thursday 30 June 2016 14:30 (50 minutes)

In this talk I will discuss the moduli spaces of pointed curves with possibly non-nodal singularities such that the marked points form a nonspecial ample divisor. I will show that such curves have natural projective embeddings, with a canonical choice of homogenous coordinates up to rescaling. Using Groebner bases technique this leads to the identification of the moduli with the quotient of an affine scheme by the torus action. These moduli spaces also have a natural interpretation in terms of the Krichever map. In the genus 1 case I will describe explicitly the corresponding GIT stability conditions. If time allows, I will explain how the same moduli spaces appear when studying A-infinity algebras associated with curves. Based on [arXiv:1511.03797,1603.01238]

Summary

**Presenter:** POLISCHCHUK, Alexander (University of Oregon) **Session Classification:** Plenary session