



Contribution ID: 4

Type: Long Talk (20 mins)

## Understanding the target space of string theory at large $\alpha'$

Friday, December 15, 2023 11:00 AM (20 minutes)

As a theory of quantum gravity, string theory is defined perturbatively around a fixed background metric. We quantify these perturbations to the metric using the inverse string tension,  $\alpha'$ . We usually consider the supergravity limit of small  $\alpha'$ , yet it is known to be possible to study beyond this regime when the background takes the form of a group manifold, such as AdS<sub>3</sub>. In this talk, I will discuss the interpretation of the target space geometry in the minimal tension limit of string theory on AdS<sub>3</sub>. We will find that the theory is most naturally written in the language of twistor theory and yet it will be possible to reinstate a more conventional spacetime interpretation. Time permitting, we will discuss applications to AdS/CFT.

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Strings

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Yes

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**Session Classification:** String Theory