



Contribution ID: 153

Type: 20 minutes talk

## Holomorphic Modular Bootstrap

*Thursday, 16 December 2021 17:30 (30 minutes)*

In this talk, we shall discuss a classification scheme, called holomorphic modular bootstrap, for classifying Rational Conformal Field Theories (RCFTs) using the Modular Linear Differential Equations (MLDEs) their characters (which are the holomorphic factors of their torus partition functions) satisfy. This is a classification scheme based on two parameters  $(n,l)$  where  $n$  is the number of linearly independent characters of the RCFT (which is also the order of the MLDE) and  $l$  is related to the order of the zeros of the Wronskian of the MLDE. We shall see how almost all known RCFTs (say for example the Ising model at criticality) can be classified in this scheme. In particular, we will present some new results on  $(3,0)$  RCFTs. Furthermore, we shall also discuss some simple novel results concerning WZW CFTs.

### Could you please give the most relevant category for your talk?

Non-Perturbative QFT

### Will you be pre-recording your talk?

No

### Would you be interested in receiving feedback on your presentation?

Yes

### Are you happy for your talk to be recorded?

Yes

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**Session Classification:** Full-length talks