

# Does String Theory Avoid Its Own Swampland? آیا نظریه ریسمان از مرداب خود حذر می کند؟

Speaker:  
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Place:  
Amphitheatre, Farmanieh building



or



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## Abstract

It is known that superstring theory in 10 or 11 dimensions is unique. However, we are living in 4 dimensions. String theory in 4 dimensions, which may be obtained via compactification over 6 or 7 extra dimensions, is far far from being unique. The space of 4 dimensional string theories is usually called string theory landscape and there may be  $10^{500}$  or more such theories. If so, string theory is doomed as a physical theory, as it has essentially no predictive power. Nonetheless, it may be rescued if one can argue that most of places in string theory landscape is not "habitable"; it is a swampland. In an attempt to crystalize and formulate this idea recently "string theory swampland conjectures" have been proposed. In this talk I give an overview of string theory landscape story, the swampland conjectures and what may follow.