

Learning metrics for string theory beyond Calabi-Yau

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Calabi-Yau manifolds are of great interest in string theory and much progress has been made in applying machine learning techniques to find their Ricci flat metrics. However, there are more general solutions to string theory which are not as frequently discussed. One of the main reasons for this is that many of the algebraic geometry tools used to describe Calabi-Yau don't apply in these cases. With machine learning tools allowing us to make qualitative progress in conquering previously insurmountable problems in differential geometry, one can imagine that perhaps these more general cases could now be approachable. I will report on some early progress in this regard and mention some of the issues with trying to pursue such a program of research.