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## **SU(3) holonomy/structure metrics for CICYs and toric varieties**

*Thursday, December 16, 2021 5:00 PM (30 minutes)*

I will introduce a Tensorflow package for sampling points and computing metrics of string compactification spaces of SU(3) holonomy or SU(3) structure. We vastly extended previous work in this area, allowing the methods to be applied to any Kreuzer-Skarke (KS) Calabi-Yau or CICY. While extensions to CICYs are rather straight-forward, toric varieties require more work. I will first explain how to obtain the (non-Ricci-flat) analog of the Fubini-Study metric for KS models, and then how to sample points uniformly from these spaces using a powerful mathematical theorem.

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