

# From Fields to Strings and Back

*Thursday 23 September 2021 14:30 (30 minutes)*

I will give a broad brush picture of a program to derive gauge-string duality in some generality. The key elements will include the reorganisation of perturbative large  $N$  gauge theory Feynman diagrams as localised integrals over closed string moduli space using the Strebel parametrisation of the latter. The general picture will be concretely illustrated by the special “tensionless string” limits of the  $AdS_3$  dual of the free symmetric orbifold CFT and the  $AdS_5$  dual to free  $N=4$  Super Yang-Mills theory. In the latter case, I will describe a recent proposal for a candidate worldsheet description involving ambitwistor fields.

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