

QCD DYNAMICS VIA HOLOGRAPHY

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- In practice, holography provides a mapping between a 4-D strongly coupled gauge theory and a 5-D classical gravity in asymptotically Anti-de Sitter spacetime
 - Really useful, as at strong coupling perturbation theory breaks and lattice simulations cannot be used for *eg* real time dynamics
- However, the most rigorous formulation of holography assumes that the QFT is a conformally symmetric super-Yang-Mills theory

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- Strongly coupled quantum systems are everywhere in nature!
- We are currently working on applications in heavy-ion collisions and neutron