

Abstract Submitted  
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**The EIC: Precision tool to explore & understand the role of gluons in QCD**<sup>1</sup> ABHAY DESHPANDE, Stony Brook University — While it is known for a decades that QCD is the correct theory that describes Strong Interactions, our understanding of the role of the gluons in QCD still remains largely unknown at extreme low and high energy, where large number of gluons (and quarks) interact with each other coherently. The high energy, polarized Electron Ion Collider (EIC) will provide a unique opportunity to systematically study and understand this as no other machine will. I will summarize the physics goals of the EIC, and present the status of the project, including anticipated steps needed to realize the project in the US.

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