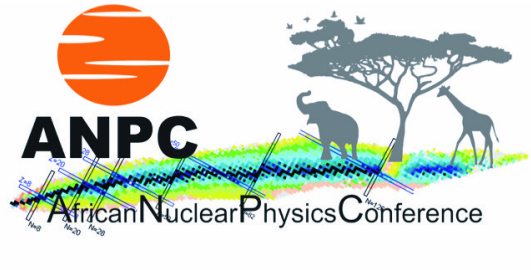

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The Electron-Ion Collider

The 2015 Long Range Plan for Nuclear Science in the US recommends a high-energy, high-luminosity polarized Electron-Ion Collider (EIC) as the highest priority for new facility construction after the completion of FRIB. A U.S.-based EIC has also recently been endorsed by the U.S.
National Academies of Sciences finding the scientific case for the EIC compelling, unique, and timely.
The EIC will, for the first time, precisely image gluons in nucleons and nuclei. It will reveal the origin of the nucleon spin and will explore a new quantum chromodynamics (QCD) frontier of ultra-dense gluon fields.
This science will be made possible by the EIC's unique capabilities for collisions of polarized electrons with polarized protons, polarized light ions, and heavy nuclei at high luminosity.
In my talk I will give an overview of the physics motivation and program of an EIC. The talk will also cover the current machine designs as well as detector concepts.

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