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## Interaction region design and auxiliary detector systems for an EIC

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There are a number of exciting physics opportunities at a future electron-ion collider facility. One possible design for such a facility is eRHIC, where the current RHIC facility located at Brookhaven National Lab would be transformed into an electron-ion collider. It is imperative for a seamless integration of auxiliary detector systems into the interaction region design to have a machine that meets the needs for the planned physics analyses, as well as take into account the space constraints due to the tunnel geometry and the necessary beam line elements. In this talk, we describe the current ideas for integrating a luminosity detector, electron polarimeter, roman pots, and a low  $Q^2$ -tagger into the interaction region for eRHIC.

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