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Far-Forward detectors at the Electron-Ion Collider

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The Electron-ion Collider to be constructed at Brookhaven National Lab is considered to be the next generation "dream machine" in future nuclear physics research. Extending the acceptance of the detector to the far forward region ($\eta > 4$) is extremely important for a wide range of measurements to be performed at EIC. The designs of the far-forward detectors (B0-spectrometer and electromagnetic calorimeter, Roman Pot and Off-Momentum dectectors and the Zero-Degree Calorimeter) proposed by the ECCE Consortium are described. Detection of forward-going particles with high energy and position resolution as well as two-photon separation reveal new possibilities to provide experimental access to various processes including pion form factor measurements, diffractive and photoproduction processes and u-channel DVCS. The prospects of such measurements exploiting, in particular the B0 and ZDC detectors, are also discussed.

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