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### **Opportunities in Photoproduction and Spectroscopy at an EIC**

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In recent years, a large number of new states have been observed in the spectrum of heavy quark mesons, both in  $e^+e^-$  collisions and in the decays of  $B$  mesons. These states, referred to as  $XYZ$  mesons, were not expected in the spectrum of heavy quark-antiquark bound states, and their interpretation remains uncertain. The photoproduction process provides an attractive and complementary production mechanism to study these exotic states and potentially discover new states which are challenging to access through other mechanisms. The proposed Electron-Ion Collider (EIC) is a new high-energy and high-luminosity electron-ion machine with a versatile range of kinematics and beam polarizations, capable of providing new opportunities to study heavy quark meson spectroscopy through photoproduction. In this talk, I will review the recent progress in heavy quark meson spectroscopy and discuss the prospects for hadron spectroscopy at an EIC.