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Coulomb breakup of proton rich exotic nuclei[1] RAVINDER KUMAR, Department of Physics Astronomy, Texas A M University, Commerce, TX 75428, ANGELA BONACCORSO, INFN, Sezione di Pisa, Largo Pontecorvo 3, 56127 Pisa, Italy, CARLOS BERTULANI, Department of Physics Astronomy, Texas AM University, Commerce,TX-75428, USA., CARLOS BERTULANI COLLABORATION, ANGELA BONACCORSO COLLABORATION — We have studied the single proton breakup from weakly bound 8B and 17F exotic nuclei due to Coulomb reaction mechanisms in light and heavy target cases. The role of recoil effect of the core-target Coulomb potential and direct proton-target Coulomb potential has been studied exclusively. We have calculated the breakup cross section and parallel momentum distribution (LMD) for 8B and 17F projectiles on a light and a heavy target in a medium beam energy range (40A–80A MeV). The calculation of the direct and recoil Coulomb effects separately and of their interference is the new aspect of this work.

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