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Talmage James Reid\*, Department of Mathematics, Hume Hall 305, Oxford, MS 38677, and Joao P Costalonga (joaocostalonga@gmail.com) and Haidong Wu (hwu@olemiss.edu). A Characterization of 3-connected graphs with no pair of disjoint cycles containing a specified edge. Preliminary report.

Dirac and Lovász independently characterized the 3-connected graphs with no pair of vertex-disjoint cycles. In this paper, we completely characterize the 3-connected graphs that contain an edge e such that there is no pair of vertex-disjoint cycles in G whose union contains e. We also answer the analogous question for edge-disjoint cycles. (Received January 07, 2019)