1077-VJ-553 **Steven J. Tedford\*** (stedford@misericordia.edu). The Characteristic Polynomial for Bi-Rooted Trees.

Developed in the 1980's, the characteristic polynomial for rooted graphs and rooted digraphs is defined using a recursive procedure with edge deletions and edge contractions. We extend this polynomial to bi-rooted trees and give a non-recursive characterization of the characteristic polynomial for these trees. (Received September 07, 2011)