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Elizabeth A Weaver* (eaweaver1s@uky.edu). *Dualizing Trellises for Linear Block Codes*. Preliminary report.

Tail-biting trellises are graphical representations for codes that have proved to be useful when decoding with the Viterbi algorithm. There are several known procedures to take the trellis for a code and use it to produce a trellis representing the dual of the code. However, the resulting dual trellises do not always possess nice properties. We will examine when the different dualization processes result in isomorphic trellises and what characteristics of the original trellis are necessary to obtain a well-behaved dual trellis. (Received August 12, 2011)