1057-15-207 **Heide Gluesing-Luerssen** and **Elizabeth Weaver*** (eweaver@ms.uky.edu). *Minimal Tail-biting Trellises for Linear Block Codes.*

Linear block codes can be represented by a type of graph called a trellis which is used in decoding with the Viterbi algorithm. Since the computational complexity of this algorithm depends on the size of the trellis, it is useful to look at optimal trellises. I will consider constructions for minimal tail-biting trellises introduced by Koetter/Vardy and Nori/Shankar, and I will explore properties of both constructions and the relationships between them. (Received January 22, 2010)