1014-62-1567   **Thomas R Hagedorn*** (`hagedorn@tcnj.edu`), Dept. of Mathematics and Statistics, The College of New Jersey, P.O. Box 7718, Ewing, NJ 08618. *Computational Support of a Conjecture on Phylogenetic Invariants for the General Markov Model for k>2 states.* Preliminary report.

The author will present computational evidence in support of a conjecture on the phylogenetic invariants for the general Markov model for k>2 states. Allman and Rhodes have determined the generators of the phylogenetic ideal for a tree with n taxa and k=2 states. They have also conjectured how to find the phylogenetic ideal for a tree of n taxa when k>2, along with some evidence for the conjecture. The talk will discuss additional computational evidence for this conjecture. (Received September 28, 2005)