1009-05-21 **Emeric Deutsch** and **Bruce E. Sagan*** (sagan@math.msu.edu), Department of Mathematics, Michigan State University, East Lansing, MI 48824-1027. Congruences for Combinatorial Sequences.

We derive congruences for various sequences involving binomial coefficients, Catalan and Motzkin numbers. In particular, we are able to prove some conjectures of Benoit Cloitre. Our methods include the use of group actions as well as Lucas' Congruence. Surprisingly, the Thue-Morse sequence from combinatorics on words makes an appearance. (Received June 19, 2005)