962-T1-258   **Jeffrey W Clark*** (`clarkj@elon.edu`), Box 2122, Elon College, Elon College, NC 27244.
Exploring Finite Topologies.

It is possible to enumerate and categorize the possible topologies on a small finite set. I will explore the following questions: 1) Is there a closed-form expression for the number of topologies defined on n points? 2) We can extend any permutation from S_n to the set of topologies. How many equivalence classes are there for a set of n points? 3) What proportion of the topologies are Hausdorff? Regular? Normal? 4) How often is a singleton its own closure? 5) What is the connection between the closure of a point and the intersection of all of its neighborhoods? (Received September 05, 2000)