

Meeting: 1003, Atlanta, Georgia, MAA CP U1, MAA Session on Mathematical Experiences for Students Outside the Classroom

1003-U1-1282 **Maureen T Carroll***, Department of Mathematics, University of Scranton, Scranton, PA 18510.
A Mathematical Tournament.

Every year the Mathematics Club at the University of Scranton sponsors a “Tic-tac-toe on the affine plane of order 4” tournament. We run a single or double elimination tournament depending on the number of players, with each pair of students playing a best of three match. The top three winners receive cash prizes sponsored by the club. In this talk, I will discuss how to run one of these tournaments and more importantly, explain how the game is played. I will also demonstrate my web-accessible software that allows students to practice and play. While a knowledge of finite geometry is not required to play the game, we have found that it helps our geometry students develop an intuition for affine planes which in turn reveals properties and symmetries that they may not see by simply reading definitions in a geometry text. (Received October 04, 2004)