

**Department of Mathematical Sciences  
Colloquium**

**EDUARDO ESPINOLA**

*Generalizations of the Ménage Problem*

The classical Ménage Problem asks the probability of no woman having her husband next to her when seated on a round table that holds  $n$  couples and women and men alternate. We applied the Ménage idea to different bipartite graphs like torii, hypercubes, and caterpillars. Among some variations we made to the torus, one of the most interesting was changing the husband's distance from 1 (which implies the husband is next to his wife) to any distance  $\alpha$ . In each case, the total variation distance formula between the exact distribution in question and an appropriate Poisson distribution was found.

**Friday, October 26, 2007 at 3 pm in Bell Hall 143  
The University of Texas at El Paso**

Refreshments will be served in front of the colloquium room, 15 minutes before the start of the colloquium.

For further information, please contact Dr. Pavel Solin, Bell Hall 220. Phone: (915) 747-6770, email: [solin@utep.edu](mailto:solin@utep.edu).