

APPLIED MATHEMATICS COLLOQUIUM

Date: Wednesday, March 25, 2015

Time: 2:30 – 3:30 p.m.

Location: Middlesex College Room 204

Waldegrave's Problems in Probability

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Abstract:

Pierre Rémond de Montmort's 1713 book "Essay d'analyse sur les jeux de hazard" is an update of this 1708 work of the same name. The major additions in the 1713 book are transcriptions of letters between Montmort and Nicolas Bernoulli discussing the solutions to various probability problems. Mentioned in the letters is a M. de Waldegrave, a man who was part of Montmort's network of friends proposing and solving mathematical problems. Waldegrave suggested one of his own problems known as the Problem of the Pool. For his part Montmort suggested another problem related to the card game le Her. In the solution to this problem Waldegrave gave the first expression of a mixed strategy solution in game theory. The problems are examined. By putting these problems into their historical context some insight is gained into the practice of mathematics in the early eighteenth century. The correspondence over the solution to le Her raises an interesting question. What does it mean to solve a problem? Who this amateur mathematician Waldegrave is has been the subject of speculation for several decades. Using various archival sources, Waldegrave is properly identified and put into historical context.