

**CORR 2002-26**

**A Rotation Bijection for Lattice Paths above a Line of  
Integer Slope**

**I.P. Goulden & Luis G. Serano**

**Abstract** We provide a direct geometric bijection for the number of lattice paths that never go below the line  $y = kx$  for a positive integer  $k$ . This solution to the Generalized Ballot Problem is in the spirit of the reflection principle for the Ballot Problem (the case  $k = 1$ ), but it uses rotation instead of reflection.