

**Meeting:** 1005, Newark, Delaware, SS 10A, Special Session on Symmetry Methods for Partial Differential Equations

1005-35-135      **George W Bluman\*** (bluman@math.ubc.ca), Department of Mathematics, University of British Columbia, Vancouver, BC V6T1Z2, Canada, and **Temuerchaolu.** *Local and Nonlocal Symmetries for Nonlinear Telegraph Equations.*

Local and nonlocal symmetry classifications are considered for four equivalent nonlinear telegraph (NLT) equations. A complete potential symmetry classification of a scalar NLT equation is given through the point symmetry classification of a related potential system. Six new classes of equations admit potential symmetries. The relationships between local (including contact) and nonlocal (potential) symmetries of these equations are explored. A physical example is considered. (Received February 04, 2005)