1001-35-207   **Greg J. Reid*** (`reid@uwo.ca`), Applied Mathematics Department, University of Western
Ontario, London, Ontario N6A 5B7, Canada. *Numerical Jet Geometry of Partial Differential
Equations.* Preliminary report.

In breakthrough work, Sommese, Verschelde and Wampler have initiated the new area of Numerical Algebraic Geometry.

In this talk I will describe recent progress in Numerical Geometry of Partial Differential Equations (Numerical Jet Geometry). The key tools are the continuation methods of Sommese, Verschelde and Wampler, where generic points on the components of the PDE are cut out by intersections with random linear spaces.

This is joint work with Jan Verschelde and Wenyuan Wu (UWO) (Received August 26, 2004)