

Applied Mathematics Seminar

Nonlocal symmetry analysis, explicit solutions and conservation laws for the fourth-order Burgers' equation

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Abstract:

The Painlevé analysis is carried out on the physical form of the fourth order Burgers' equation. Then, nonlocal symmetries of the equation are constructed. Also, linearization are derived based on the symmetries. In particular, the explicit solution of the equations are presented in terms of Hopf-Cole transformations. Furthermore, nonlinear self-adjointness and conservation laws of potential equation are investigated with symmetries.

Date: Tuesday, March, 8, 2016 Time: 3:00-4:00PM
Place: MAGC 1.302

Coffee will be served. For further information or for special accommodations, please contact Ranadhir Roy at 665-2371 or via email at ranadhir.roy@utrgv.edu