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**Propagation of isolated waves of coupled nonlinear (2+1)-dimensional Maccari System in Plasma Physics****Nadia Cheemaa***Zhejiang Normal University, China.*

In this article we have presented the analytical analysis of coupled integrable (2+1)-dimensional Maccari System with the aid of newly developed technique named as an extended modified auxiliary equation mapping method. As a result we have found a variety of new families of exact traveling wave solutions including triangular-type solutions, periodic and doubly periodic like solutions, combined soliton like solutions, kink and anti-kink type soliton like solutions with the help of three parameters which is the key importance of this method. Maccari System is a well-known model to define the dynamics of isolated waves, localized in a very small part of space in different fields of physics such as quantum mechanics, hydro- dynamics, plasma physics, and quantum field theory to study the dynamics of Langmuir solitons which are appearing in the nonlinear optics. For physical description of our newly obtained solutions we have expressed them graphically using Mathematica 10.4 to explain more efficiently the behavior of different shapes of solutions. Also the computational work and efficiency of the method demonstrates the reliability, straightforwardness, and simplicity of the method for solving other nonlinear complicated partial differential equations.

**Biography**

I (Nadia Cheemaa) have been doing PhD (Computational Mathematics-Mathematical Physics) from Harbin Institute of Technology, China on fully funded scholarship by China Scholarship Council (CSC). My research field is to study complex dynamical systems with analytical approach which are appearing in quantum mechanics, nano-technology, mathematical physics, chemistry, nonlinear optics, molecular biology, plasma physics, elastic media, and in different engineering disciplines. Particularly to find the solutions of bright-dark solitary waves and dispersive shock waves of these NLPDEs. I have published 18 high impact factor SCI articles in web of science (with commulative impact factor 37.459) with collaboration of Prof. Aly R. Seadawy which are highly cited. In 2011, I received BS degree in Mathematics awarded with Gold Medal from Government College University Lahore, Pakistan. In 2012 awarded with Roll of Honor for excellence performance in Mathematics from Government College University Lahore, Pakistan. And in 2014, certificate awarded of two years scholarship in MSc (Industrial Mathematics) for excellence performance from Government College University, Lahore, Pakistan.

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