



KOFANE

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Educational Curriculum	<p>November 1987 <i>Doctorate thesis</i> in Physics , University of Bourgogne , Dijon, France</p> <p>June 1998 <i>Habilitation à Diriger des Recherches (HDR)</i> in Physics, University of Bourgogne, Dijon, France</p>
Professional Experience	<p>October 01, 1988 to December 11, 1989 <i>Lecturer in Physics</i> at University of Yaounde</p> <p>December 12, 1989 to July 29, 1999 <i>Senior Lecturer</i> at University of Yaounde I</p> <p>July 30, 1999 to July 29, 2003 <i>Associate Professor</i> at University of Yaounde I</p> <p>July 30 2003 to today <i>Professor</i> at University of Yaounde I</p>
Current research interest	<ul style="list-style-type: none"> - Nonlinear optics - Chaos Theory - Soliton Theory
Research methods	<ul style="list-style-type: none"> - Variational approach - Modified Darboux transformation method - Collective variable technique - Split-step Fourier method
Publications	<ol style="list-style-type: none"> 1. D. D. Estelle Temgoua and T. C. Kofane Nonparaxial rogue waves in optical Kerr media: Physical Review E 91 (2015), p. 063201. 2. D. D. Estelle Temgoua, and T. C. Kofane Influence of optical activity on rogue waves propagating in chiral optical fibers: Physical Review E 93 (2016), p. 062223. 3. Martin Djoko, T. C. Kofane Dissipative optical bullets modeled by the cubic-quintic-septic complex Ginzburg-Landau equation with higher-order dispersions: Communications in Nonlinear Science and Numerical Simulation 53 (2017) pp. 22-30.

Title of the talk *Scalar and Vector 2D, 3D and 4D Dissipative optical light bullets, Rogue waves in paraxial and nonparaxial optical solitons*

Abstract of the talk (10 lines):

The need to transmit more and more information quickly on the web is pushing many laboratories to discover new technologies, to increase the ability of optical fibers to carry digital communications. Driven by this growing desire, research has reached the point where the future high-speed fiber optics could be based on the exploitation of different modes of data transmission, which is based on the kinetic momentum orbital light waves. Therefore, optical fibers could transmit data by means of a kind of vortex of light. It is electromagnetic waves having a polarization and therefore a particular spin, more precisely, an orbital angular momentum. With such waves, one could theoretically increase the rate of optical fibers in the same frequency band. By using signals with orbital angular momentum modes at different wavelengths, Wavelength Division Multiplexing has even been possible.