

1067-35-786

Karen Yagdjian* (yagdjian@utpa.edu), Department of Mathematics, University of Texas-Pan American, 1201 W. University Drive, Edinburg, TX 78541-2999. *On the global solutions of the Higgs boson equation.*

In this talk we discuss global in time solutions of the equation for the Higgs boson in the Minkowski and in the de Sitter spacetimes. We reveal some qualitative behavior of the global solutions. In particular, for the global solutions we formulate sufficient conditions for the existence of the zeros in the interior of the support of solutions and, consequently, for the creation of bubbles. (Received September 14, 2010)