

Chaotic Behavior of a Model of the Hypothalamo-Pituitary-Gonad Axis in Human Male

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Abstract: A nonlinear dynamical model for the pulsatile secretion of the hypothalamo-pituitary-gonad axis in human male is proposed and chaotic solutions are obtained. We investigate the bifurcation character of the solution and calculate the Lyapunov exponents. Some deductions of this model are obtained and compared with experimental results. All the results show that the model is a quite reasonable one.

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