Title: Existence of almost periodic solutions of a feedback delay model for the control of testosterone secretions

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ABSTRACT.

The brain is most important part of the human body, especially members of ICDE 2015 and also, of course, the second important part of the body is a heart as the meaning of character of human. What is the next important part of the body? It absolutely seems to me that the reproductive function is important, specially men. If some good guy (≤ 60 olds?) lacks procreative power which is like of ED (Erectile Dysfunction), his and her life are not happy. Then, in this talk, we consider the existence of almost periodic solutions of a delay difference model for the control of hormonal system of testosterone secretions with negative double feedbacks.

References

- M. Cartwright and H. Husain. A model for the control of testosterone secretion, J. theor. Biol., 123, (1986), 239-250.
- P. Das, A. B. Roy and A. Das, Stability and oscillations of a negativefeedback delay model for the control of testosterone secretion, BioSystems 32, (1994), 61-69.
- [3] Y. Hamaya, Existence of almost periodic solutions of discrete Ricker delay models, Inter. J. Difference Equations, 9, No.2, (2014), 187-205.
- [4] J. D. Murray, *Mathematical Biology*, Third Edition, Springer, 2002.
- [5] W. R. Smith, Hypothalmic regulation of pituitary secretion of luteinzing hormone, Bull. Math. Biol., 42, (1980), 57-78.