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# "On autonomous and nonautonomous modified hyperchaotic complex Lü systems"

G. M. Mahmoud, M. E. Ahmed N. Sabor

## Abstract:

In this paper autonomous and nonautonomous modified hyperchaotic complex Lü systems are proposed. Our systems have been generated by using state feedback and complex periodic forcing. The basic properties of these systems are studied. Parameters range for hyperchaotic attractors to exist are calculated. These systems have very rich dynamics in a wide range of parameters. The analytical results are tested numerically and excellent agreement is found. A circuit diagram is designed for one of these hyperchaotic complex systems and simulated using Matlab/Simulink to verify the hyperchaotic behavior.

## Keywords:

Hyperchaotic attractors; chaotic; complex; fixed points; stability

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