

# Appearance of q-Gaussians in Dynamical Systems

**Ugur TIRNAKLI<sup>1</sup>**

<sup>1</sup>Izmir University of Economics, izmir, Turkey

The standard central limit theorem is responsible for the ubiquitous appearance of Gaussians in real and model systems where ergodicity rules the dynamics. On the other hand, in systems where ergodicity is broken, the standard central limit behavior seems to be consistently modified [1]. For a class of such systems, an appropriate generalization of the central limit theorem yields q-Gaussian behavior. This ubiquitous appearance of q-Gaussians in low-dimensional Hamiltonian dynamical systems will be discussed in this talk in detail [2-4].

References:

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