

# Isostables for Stochastic Oscillators

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Phase-Amplitude variables are indispensable tools to characterize oscillatory dynamics. However, achieving an extension of these tools to stochastic oscillators, i.e., noisy excitable systems, has remained an open question until very recently. In this talk, I will present a framework for the “phase-amplitude” description of stochastic oscillators [1,2], and discuss its applications towards a single-equation phase description of noisy limit cycle and excitable systems.

[1] - B.Lindner, P.Thomas. 'Asymptotic Phase for Stochastic Oscillators'. Physical Review Letters 2014

[2] - A.Pérez-Cervera, B.Lindner, P.Thomas. 'Isostables for Stochastic Oscillators'. Physical Review Letters 2021

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## Quan i on?

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