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**Asymptotic distribution for periodograms of infinite dimensional discrete time periodically correlated processes.** (English) [Zbl 1244.60038](#)

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From the abstract: "In this article, we shall consider a class of strongly  $T$ -periodically correlated processes with values in a separable complex Hilbert space  $\mathbf{H}$ . The periodograms of these processes and their statistical properties were previously studied by the authors. In this paper, we derive the asymptotic distribution of the periodogram that appears to be a certain Wishart distribution on  $\mathbf{H}^T$ ."

Reviewer: Miroslav M. Ristic (Niš)

**MSC:**

[60G12](#) General second-order stochastic processes

[60G57](#) Random measures

[60B12](#) Limit theorems for vector-valued random variables (infinite-dimensional case)

[60F05](#) Central limit and other weak theorems

[62M15](#) Inference from stochastic processes and spectral analysis

Cited in **2** Documents

**Keywords:**

Hilbert-space-valued processes; strong second order processes; periodically correlated; finite Fourier transforms; periodogram; asymptotic distribution

**Full Text:** [DOI](#)

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