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A Characterization of Distributional Convergence with Respect to Power Series Methods

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Abstract

In this talk, we introduce a notion of P-distributional convergence. Using the known characterization of P-strong convergence in terms of P-statistical convergence and P-uniform integrability, we obtain an equivalent characterization involving P-distributional convergence. Consequently, we establish the equivalence between P-strong convergence, P-statistical convergence together with P-uniform integrability, and P-distributional convergence together with P-uniform integrability. For the corresponding characterization in the topological setting, we refer the interested reader to Theorem 4 in [3].

Keywords: P-statistical convergence, P-strong convergence, P-distributional convergence.

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