

**Bourgain, J.**

**An approach to pointwise ergodic theorems.** (English) [Zbl 0662.47006](#)

Geometric aspects of functional analysis, Isr. Semin. 1986-87, Lect. Notes Math. 1317, 204-223 (1988).

[For the entire collection see [Zbl 0638.00019](#).]

Continuing his previous investigations of the individual ergodic theorem the author states the following

Theorem 1. Let  $(\Omega, \mathcal{B}, \mu, T)$  be a dynamical system. Denoting  $\mathfrak{P}_N = \{p | p = \text{prime} \leq N\}$  and  $|\mathfrak{P}_N|$  its cardinality, the ergodic means

$$A_N f = |\mathfrak{P}_N|^{-1} \sum_{p \in \mathfrak{P}_N} T^p f$$

converge almost surely for  $f \in L^2(\Omega, \mu)$ .

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**MSC:**

[47A35](#) Ergodic theory of linear operators

[28D05](#) Measure-preserving transformations

Cited in **3** Reviews  
Cited in **5** Documents

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[individual ergodic theorem](#); [dynamical system](#); [ergodic means](#)