

**CORRECTIONS TO THE PAPER "TAUBERIAN THEOREMS
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The proof of Theorem 2 was misleded. We give following proof. The uniform convergency of the series

$$\sum \frac{a_\nu}{\nu} \frac{\sin \nu t}{t}$$

in the interval $0 < \varepsilon \leq t \leq 2\pi - \varepsilon$, is evident from (7). We write

$$\sum_{\nu=1}^{\infty} \frac{a_\nu}{\nu} \frac{\sin \nu t}{t} = \sum_{\nu=1}^n + \sum_{\nu=n+1}^{\infty} = u_1(t) + u_2(t),$$

say, where $n = [t^{-\frac{1}{a}} \varepsilon^{-\frac{1}{a}}]$. Then

$$|u_2(t)| \leq t^{-1} \sum_{\nu=n+1}^{\infty} \left| \frac{a_\nu}{\nu} \right| = O(t^{-1} n^{-a}) \leq \varepsilon.$$

Applying Abel's transformation twice to $u_1(t)$, we get

$$u_1(t) = \sum_{\nu=1}^{n-1} a_\nu \frac{\sin \nu t}{\nu t} = \frac{1}{t} \left(\sum_{\nu=1}^n S_\nu \Delta_\nu^2(t) + S_{n-1} \Delta_n(t) + s_n \frac{\sin nt}{n} \right)$$

where

$$\Delta_n(t) = \frac{\sin nt}{n} - \frac{\sin(n+1)t}{n+1}, \quad \Delta_n^2(t) = \Delta(\Delta_n t).$$

Since we have easily

$$\Delta_n(t) = O\left(\frac{t}{n}\right), \quad \Delta_n^2(t) = O\left(\frac{t^2}{n}\right),$$

$$\begin{aligned} |u_1(t)| &= \frac{1}{t} \left\{ \sum_{\nu=1}^{n-1} o(\nu^a) \left(\frac{t^2}{\nu}\right) + o(n^a) \left(\frac{t}{n}\right) + O(n^{1-a}(n^{-1})) \right\} \\ &= o(t \cdot n^a) + o(n^{a-1}) + O(n^{-a} t^{-1}) \\ &= o(1) + o(1) + \varepsilon = o(1). \end{aligned}$$

Thus we have the desired results.