TEST
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CORRECTION

Correction to: A general near-exact distribution theory for the most common likelihood ratio test statistics used in Multivariate Analysis

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Correction to:
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In the first expression in Section 5 the factor $1/(2\pi)$ is missing; this expression should rather read

$$\Delta = \frac{1}{2\pi}\int_{-\infty}^{+\infty}\left|\frac{\Phi_{W_k}(t)-\Phi^*_{W_k}(t)}{t}\right|dt$$

Also in Section 5, right befor the first expression in the second paragraph, where it is written $W = W_k + W_{k'}$, it should be mentioned 'where W_k and $W_{k'}$ are independent'. And yet on this same paragraph, in expression (30), the factor $1/(2\pi)$ is missing in all expressions, and there is also a W_2 which should be $W_{k'}$; this expression should rather read

$$\Delta_W = \frac{1}{2\pi}\int_{-\infty}^{+\infty}\left|\frac{\Phi_W(t)-\Phi^*_W(t)}{t}\right|dt$$

The original article can be found online at https://doi.org/10.1007/s11749-010-0193-3.

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$$
\begin{aligned}
&= \frac{1}{2\pi} \int_{-\infty}^{+\infty} \left| \frac{\Phi_{W_k}(t)\Phi_{W_{k'}}(t) - \Phi_{W_k}(t)\Phi^*_{W_{k'}}(t)}{t} \right| dt \\
&= \frac{1}{2\pi} \int_{-\infty}^{+\infty} \underbrace{\left|\Phi_{W_k}(t)\right|}_{\leq 1} \left| \frac{\Phi_{W_{k'}}(t) - \Phi^*_{W_{k'}}(t)}{t} \right| dt \\
&\leq \frac{1}{2\pi} \int_{-\infty}^{+\infty} \left| \frac{\Phi_{W_{k'}}(t) - \Phi^*_{W_{k'}}(t)}{t} \right| dt \; = \; \Delta_{W_{k'}}. \qquad (30)
\end{aligned}
$$