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CORRECTION TO "EXPONENTIAL DECAY OF POSITIVITY PRESERVING SEMIGROUPS ON L^P" (THIS JOURNAL VOL. 37 (2000), 603–624)

MASANORI HINO

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The proof of Theorem 2.8 in the paper titled above contains an error. The identity

$$\int_X \rho_k^{q-1}\rho_k\,dm = \int_X (S^n\rho_k^{q-1})\rho_k\,dm$$

in the proof is true only when $n = 1$ in general. We modify the proof as follows. By applying the original proof to S^n itself, we can take $\tilde{\rho} \in \mathrm{Ker}(1-(S^n)^*)$ such that $\tilde{\rho} \geq 0$ and $\tilde{\rho} \not\equiv 0$ m-a.e. Define $\rho = \sum_{j=0}^{n-1}(S^j)^*\tilde{\rho}$. Then $S^*\rho = \rho$, $\rho \geq 0$ and $\rho \not\equiv 0$ m-a.e. This completes the proof.

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