J. Fac. Sci. Univ. Tokyo
Sect. IA, Math.
38 (1991), 209.

Erratum: "Some inequalities for some increasing additive functionals of planar Brownian motion and an application to Nevanlinna theory"

By Atsushi ATSUJI

i) of Lemma 3 is not valid in general, therefore it is not available for the proof of iv) of Proposition. Because of this the author should correct the statement of the theorem as follows and eliminate iv) of Proposition.

THEOREM iii) *If* $\alpha\in(0,\infty)$, *there exist constants* $c_5>0, c_6>0$ *such that for any* $\mathcal{F}_t$*-stopping time* σ

$$E_1\left(\int_0^\sigma g(z_s)ds\right)^\alpha\leq c_5E_1(\log^+\sigma)^\alpha+c_6. \tag{1.3}$$

iv) *Let* $G(z)$ *be any function on* $\boldsymbol{C}$ *satisfying that* $G(z)\geq\dfrac{1}{(1+|z|^2)^2}$.

If $\alpha\in(0,1)$, *there exists a constant* $c_7>0$ *such that for any* $\mathcal{F}_t$*-stopping time* σ

$$c_7E_1(\log^+\sigma)^\alpha\leq E_1\left(\int_0^\sigma G(z_s)ds\right)^\alpha. \tag{1.4}$$

The proof of iv) immediately follows from Burkholder-Gundy's inequality and Carne's one ([3], Ref. in the paper), therefore this is not new. As for iii) of Theorem we have only to change "$\alpha\in(0,1)$" to "$\alpha\in(0,\infty)$". It is easy to check its validity from our proof. Such changing of the statements does not influence our application of Theorem to the proof of Nevanlinna's theorem.

(Received October 5, 1990)

Department of Pure and Applied Sciences
College of Arts and Sciences
University of Tokyo
Komaba, Tokyo
153 Japan