



Corrigendum to “Uniqueness of power of a meromorphic function with its differential polynomial”

Bikash Chakraborty

The following is the corrected statement of the main result of ([1]):

Theorem 2.1. *Let $k(\geq 1)$, $n(\geq 1)$ be integers and f be a non-constant meromorphic function. Let $P[f]$ be a homogeneous differential polynomial of degree $\bar{d}(P)$ and weight Γ_P such that $\Gamma_P > (k + 1)\underline{d}(P) - 2$, where k is the highest derivative in $P[f]$. Also, let $a(z)(\not\equiv 0, \infty)$ be a small function with respect to f . Suppose $f^n - a$ and $P[f] - a$ share $(0, l)$. If $l \geq 2$ and*

$$(\Gamma_P - \underline{d}(P) + 3) \Theta(\infty, f) + \mu_2 \delta_{\mu_2^*}(0, f) + \underline{d}(P) \delta_{2+\Gamma_P-\underline{d}(P)}(0, f) > \Gamma_P + \mu_2 + 3 - n, \quad (2.1)$$

or, $l = 1$ and

$$\left(\Gamma_P - \underline{d}(P) + \frac{7}{2} \right) \Theta(\infty, f) + \frac{1}{2} \Theta(0, f) + \mu_2 \delta_{\mu_2^*}(0, f) + \underline{d}(P) \delta_{2+\Gamma_P-\underline{d}(P)}(0, f) > \Gamma_P + \mu_2 + 4 - n, \quad (2.2)$$

or, $l = 0$ and

$$(2(\Gamma_P - \underline{d}(P)) + 6) \Theta(\infty, f) + 2\Theta(0, f) + \mu_2 \delta_{\mu_2^*}(0, f) + \underline{d}(P) \delta_{1+\Gamma_P-\underline{d}(P)}(0, f) + \underline{d}(P) \delta_{2+\Gamma_P-\underline{d}(P)}(0, f) > 2\Gamma_P + \mu_2 + 8 - n, \quad (2.3)$$

then $f^n \equiv P[f]$.

Remark 1. The changes are the typographical mistakes. Thus the changes do not affect the proof.

References

- [1] B. Chakraborty, Uniqueness of power of a meromorphic function with its differential polynomial, Tamkang J. Math., **50** (2)(2019), 133–147.