

The Defect Relation Of Meromorphic Maps On Parabolic Manifolds

NON-INTEGRATED DEFECT RELATION FOR MEROMORPHIC MAPS FROM A KÄHLER MANIFOLD INTERSECTING HYPERSURFACES IN SUBGENERAL OF $\mathbb{P}^n(\mathbb{C})$

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ABSTRACT. In this article, we establish a truncated non-integrated defect relation for meromorphic mappings from an m -dimensional complete Kähler manifold into $\mathbb{P}^n(\mathbb{C})$ intersecting q hypersurfaces Q_1, \dots, Q_q in k -subgeneral position of degree d , i.e., the intersection of any $k+1$ hypersurfaces is emptyset. We will prove that

$$\sum_{i=1}^q \delta_f^{[u-1]}(Q_i) \leq (k-n+1)(n+1) + \epsilon + \frac{\rho u(u-1)}{d},$$

where u is explicitly estimated and d is the least common multiple of d_i 's. Our result generalizes and improves previous results. In the last part of this paper we will apply this result to study the distribution of the Gauss map of minimal surfaces.

1. INTRODUCTION AND MAIN RESULT

Let M be a complete Kähler manifold of dimension m . Let $f : M \rightarrow \mathbb{P}^n(\mathbb{C})$ be a meromorphic mapping and Ω_f be the pull-back of the Fubini-Study form Ω on $\mathbb{P}^n(\mathbb{C})$ by f . For a positive integer μ_0 and a hypersurface D of degree d in $\mathbb{P}^n(\mathbb{C})$ with $f(M) \not\subset D$, we denote by $\nu_f(D)(p)$ the intersection multiplicity of the image of f and D at $f(p)$.

In 1985, H. Fujimoto [5] defined the notion of the non-integrated defect of f with respect to D truncated to level μ_0 by

$$\delta_f^{\mu_0} := 1 - \inf\{\eta \geq 0 : \eta \text{ satisfies condition } (*)\}.$$

Here, the condition $(*)$ means that there exists a bounded non-negative continuous function h on M whose order of each zero is not less than $\min\{\nu_f(D), \mu_0\}$ such that

$$d\eta\Omega_f + \frac{\sqrt{-1}}{2\pi} \partial\bar{\partial} \log h^2 \geq [\min\{\nu_f(D), \mu_0\}].$$

And then he gave a result analogous to the defect relation in Nevanlinna theory as follows.

Theorem A (see [5, Theorem 1.1]). *Let M be an m -dimensional complete Kähler manifold and ω be a Kähler form of M . Assume that the universal covering of M is biholomorphic to a ball in \mathbb{C}^m . Let $f : M \rightarrow \mathbb{P}^n(\mathbb{C})$ be a meromorphic map which is linearly nondegenerate (i.e., its image is not contained in any hyperplane of $\mathbb{P}^n(\mathbb{C})$). Let*

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Suppose that M is a parabolic manifold of dimension m and V is a vector space of dimension $n+1 > 1$. Let $f: M \rightarrow V$ be a meromorphic map and B -fraktur sign. The Defect Relation of Meromorphic Maps on Parabolic Manifolds cover image. *Memoirs of the American Mathematical Society*; 78 pp; Softcover. This book is intended for graduate students and research mathematicians working in several complex variables and analytic spaces. where M is a m -dimensional parabolic manifold and where. \mathbb{P}^n is the the two Main Theorems of Nevanlinna and the Defect relation for meromorphic maps. THE DEFECT RELATION OF MEROMORPHIC MAPS. ON PARABOLIC MANIFOLDS. Abstract. by. George Lawrence Ashline. Suppose that M is a parabolic. This paper establishes a defect relation for linearly nondegenerate meromorphic mappings from parabolic manifolds into the projective space intersecting. The Defect Relation of Meromorphic Maps on Parabolic Manifolds: Issue - Ebook written by George Lawrence Ashline. Read this book using Google Play. Buy The Defect Relation of Meromorphic Maps on Parabolic Manifolds (Memoirs of the American Mathematical Society) by George Lawrence Ashline (ISBN. The Defect Relation of Meromorphic Maps on Parabolic Manifolds: George Lawrence Ashline: romagna-booking.com: Books.romagna-booking.com - Buy The Defect Relation of Meromorphic Maps on Parabolic Manifolds (Memoirs of the AMS) book online at best prices in India on romagna-booking.com We establish a defect relation for algebraically non-degenerate meromorphic maps over generalized p -parabolic manifolds that intersect. function created by E. I. Nochka, this work proves the Cartan's conjecture on defect relations for a degenerate meromorphic map from a parabolic manifold. Buy The Defect Relation of Meromorphic Maps on Parabolic Manifolds from Waterstones today! Click and Collect from your local Waterstones or get FREE UK. The Defect Relation of Meromorphic Maps on Parabolic Manifolds by George Lawrence Ashline in Books with free delivery over \$60 at Australia's biggest online. A defect relation for meromorphic maps on parabolic manifolds intersecting hypersurfaces. Ru, Min, Liu, Yuancheng. *Illinois Journal of Mathematics* The characterization of strictly parabolic manifolds [18] P.M. Wong, Defect relations for meromorphic maps on parabolic manifolds, preprint. [19] S.-T. Yau. Buy The Defect Relation of Meromorphic Maps on Parabolic Manifolds (Memoirs of the American Mathematical Society) From WHSmith today!.

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