

**Bismut, Jean-Michel; Lebeau, Gilles**

**Immersions complexes et métriques de Quillen. (Complex immersions and Quillen metrics).**

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C. R. Acad. Sci., Paris, Sér. I 309, No. 7, 487-491 (1989).

Summary: Let  $i$  be an immersion of compact complex manifolds, let  $\eta$  be a holomorphic vector bundle on  $Y$ , let  $(\xi, \nu)$  be a holomorphic chain complex on  $X$  which provides a resolution of the sheaf  $i_* \mathcal{O}_Y(\eta)$ . Let  $\lambda(\xi)$ ,  $\lambda(\eta)$  be the inverses of the determinants of the cohomology of  $\xi$ ,  $\eta$ , and let  $\sigma \in \lambda(\eta)^{-1} \otimes \lambda(\xi)$  be the canonical section which identifies  $\lambda(\eta)$  to  $\lambda(\xi)$ . When  $X$ ,  $Y$ ,  $\xi$ ,  $\eta$  are equipped with Hermitian metrics, we calculate the norm of  $\sigma$  with respect to the corresponding Quillen metric.

**MSC:**

**53C55** Global differential geometry of Hermitian and Kählerian manifolds

**32Q99** Complex manifolds

Cited in **5** Reviews

Cited in **6** Documents

**Keywords:**

immersion; compact complex manifolds; holomorphic vector bundle; Hermitian metrics; Quillen metric