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Song-Ying Li* (sli@math.uci.edu), Department of Math, University of California, Irvine, CA 92697-3875. *Riemann zeta function associated to a sub-Laplacian.*

Let (M, θ) be a strictly pseudoconvex pseudo-hermitian manifold. Let Δ_M be the sub-Laplacian, which is the real part of Kohn's Laplacian with respect to θ . Let $\zeta_M(z)$ be the Riemann zeta function defined through the eigenvalues of Δ_M . In this talk, I will present some known results for the zeta function. Especially, a joint work with D. C. Chang, for an explicit formula for $\zeta_M(z)$ when M is sphere in C^n . A symmetric function equation for these zeta functions are also given. (Received February 17, 2005)