Abstract:
A theorem by W. J. Sweeney in [`Coerciveness in the Neumann problem.` *J. Differential Geometry*, 6 : 375393, 1971/72.] stated in a very general manner with long and difficult to understand proof implies that subelliptic estimates of the $\overline{\partial}$-Neumann operator are invariant for smooth metrics. I give a much simpler proof for the invariance of the subelliptic estimates of the $\overline{\partial}$-Neumann operator for smooth metrics. Moreover, a natural question to ask is whether the same is true for the compactness estimate of the $\overline{\partial}$-Neumann operator and the answer is yes.