

This session is intended as a complement to the classical Kodaira-Spencer results on deformations of complex structures. The Bott-Chern and Aeppli cohomologies, together with the corresponding 4-th order Laplace-type operators that provide a Hodge theory thereof, will be presented. Schweizer's Aeppli Laplacian and simplification of the Kodaira-Spencer proof of the deformation openness of the Kähler property of compact complex manifolds, will be presented in the form of exercises with detailed hints guiding the students through the proof. A similar approach will be adopted with respect to the new Hodge theory, using recently introduced pseudo-differential Laplace-type operators, for all the pages of the Frölicher spectral sequence of a compact complex manifolds and its applications to deformation theory.