Ichiro Shigekawa: Hodge-Kodaira operators in infinite dimensional spaces

Abstract: We will discuss the Hodge-Kodaira operator in infinite dimensional spaces. The Hodge-Kodaira operator $\Box = -(d\delta + \delta d)$ acts on differential forms. We are interested in the bottom of the spectrum of $-\Box$. We give two examples that the bottom is strictly positive. One is the Wiener space with a weighted measure and the other is a unbounded lattice spin system.