

**A GEOMETRICAL APPROACH TO SAMPLING
FORMULAE AND OBLIQUE PROJECTIONS IN
HILBERT SPACES**

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This talk is devoted to study the connection between sampling formulas in subspaces of a space H of square summable functions, with idempotents of $B(H)$, i. e., projections. It turns out that each sampling formula comes from a projection, and conversely, each projection produces a sampling formula, after the choice of convenient basis of certain subspaces. This fact suggests the interest of studying certain factorizations of a given projection. Moreover, the well known differential geometry of the manifold of all projections can be used to produce nice “curves of sampling formulas”.