Classes of Semi inner product space

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Abstract Semi-inner products provides a natural framework to extend Hilbert-space concepts to a more general classes of Banach spaces. In this talk, based on the work by J. R. Giles, we discuss the construction and basic properties of semi inner product. In particular we consider the connection between such spaces and the differentiability of the norm. We finally show the Riesz-type representation result for continuous semi inner product space when endowed with uniform convexity. We also discuss the induced semi inner product structure on the dual space.