Title: *The Segal-Bargmann Transform and Coupled Supersymmetry.*

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Abstract: The Segal-Bargmann transform is a Lie algebra and Hilbert space isomorphism between real and complex representations of the oscillator algebra. The Segal-Bargmann transform is useful in time-frequency analysis as it is closely related to the short-time Fourier transform. The Segal-Bargmann space provides a useful example of a reproducing kernel Hilbert space. Coupled supersymmetries (coupled SUSYs) are generalizations of the quantum harmonic oscillator that have a built-in supersymmetric nature and enjoy similar properties to the quantum harmonic oscillator. In this talk, we will develop the usual Segal-Bargmann transform and discuss some of its properties and develop Segal-Bargmann transforms for a certain class of coupled SUSYs and discuss some of their properties.