COMPLEX ANALYSIS SEMINAR

COMPACTNESS OF HANKEL PRODUCT $H_\psi^* H_\varphi$ ON THE WEIGHTED BERGMAN SPACE ON THE UNIT BIDISK

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ABSTRACT: We are interested in the Hankel product $H_\psi^* H_\varphi$ on the weighted Bergman space $A^2(\mathbb{D}^2, dV_{\alpha,\beta})$, where $\alpha, \beta \in \mathbb{N}$ and

$$dV_{\alpha,\beta} = (1+\alpha)(1+\beta)(1-|z|^2)^\alpha (1-|w|^2)^\beta dA(z) dA(w).$$

For some special symbols $\varphi, \psi \in L^\infty(\mathbb{D}^2)$, I will show a necessary condition for this operator to be compact.

Date: Thursday, January 31, 2013

Time: 4pm-5pm

Place: UH 4100A

Webpage: `http://math.utoledo.edu/~ssahuto/complexseminar.html`