COMPLEX ANALYSIS SEMINAR

RESTRICTIONS TO INVARIANT SUBSPACES OF COMPOSITION OPERATORS

Derek Thompson

Trine University

ABSTRACT: Invariant subspaces are a natural topic in linear algebra and operator theory. In some rare cases, the restrictions of operators to different invariant subspaces are unitarily equivalent, such as certain restrictions of the unilateral shift on the Hardy space of the disk. A composition operator with symbol fixing 0 has a nested sequence of invariant subspaces, and if the symbol is linear fractional and extremally noncompact, the restrictions to these subspaces all have the same norm and spectrum. Despite this evidence, we will use semigroup techniques to show many cases where the restrictions are still not unitarily equivalent.

Date: Thursday, April 11, 2013

Time: 4pm-5pm

Place: UH 4100A

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