1047-47-198 Yun-Su Kim* (Yun-Su.Kim@utoledo.edu), Department of Mathematics, Mail Stop 942, The University of Toledo, 2801 W. Bancroft St., Toledo, OH 43606-3390. Every transcendental operator has a non-trivial invariant subspace.

In this talk, contraction operators are classified into three classes; (Case 1) completely non-unitary contractions with a non-trivial algebraic element, (Case 2) completely non-unitary contractions without a non-trivial algebraic element, or (Case 3) contractions which are not completely non-unitary. We know that every operator of (Case 3) has a non-trivial invariant subspace. In this talk, we answer to the invariant subspace problem for the operators of (Case 2). (Received January 28, 2009)