1147-47-327 **Joel H Shapiro*** (joels314@gmail.com), Portland State University. *Remarks on algebras associated with composition operators.*

Each bounded linear operator T on a Hilbert space gives rise to the unital algebra $A(T)$ that it generates, and to three naturally related algebras that are closed in the weak operator topology:

(a) The weak-operator closure $W(T)$ of $A(T)$,

(b) The commutant $\{T\}'$ of T, and

(c) The "double commutant" $\{T\}''$.

It's easy to see that $W(T) \subset \{T\}'' \subset \{T\}'$, so it's of interest to ask, for a given operator T, if either of these set containments is an equality.

This talk will survey some recent work done by various authors on this question for T a linear-fractionally induced composition operator on the Hardy space of the unit disc, and it will explore the relationship between these results and Victor Lomonosov's notion of *strong compactness*.

These results follow a well-known pattern: Linear-fractionally induced composition operators exhibit surprisingly diverse behavior; even the simplest such maps can give rise to interesting questions. (Received January 19, 2019)