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Rebecca Schmitz* (rjs2j@virginia.edu), University of Virginia, Department of Mathematics, PO Box 400137, Charlottesville, VA 22904-4137. *Toeplitz-composition C^* -algebras with piecewise continuous symbols.*

Let φ be an analytic self-map of the unit disk D and let H^2 denote the Hardy-Hilbert space on D . Define the composition operator on H^2 by

$$C_\varphi f = \varphi \circ f$$

for f in H^2 . In particular, we are interested in the case where φ is a linear-fractional self-map of D , not an automorphism, with $\varphi(\zeta) = \eta$ where ζ, η are points in the unit circle. Recent work of Kriete, MacCluer, and Moorhouse describes the C^* -algebra generated by such a composition operator and the Toeplitz operators with continuous symbol on the Hardy space H^2 . We consider a larger C^* -algebra where the symbols of the Toeplitz operators are allowed to be piecewise continuous and investigate essential spectra of operators within this algebra. (Received September 13, 2007)