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**Michael R. Pilla\***, mpilla@iu.edu. *Spectra of Composition Operators on the Drury-Arveson Space of Analytic Functions on the Unit Ball in  $\mathbb{C}^2$ .*

A composition operator with symbol  $\phi$  is a linear operator defined by  $C_\phi f = f \circ \phi$ . Given an analytic map  $\phi$  of the unit ball into itself, we study the solutions to the equation  $C_\phi f = \lambda f$  for all complex numbers  $\lambda$  and  $f : \mathbb{B}_2 \rightarrow \mathbb{C}$  in the Drury-Arveson space which is defined as the Hilbert function space with kernel  $k(z, w) = \frac{1}{1-\langle z, w \rangle}$ .

On the unit disk  $\mathbb{D}$ , models of iteration and intertwining maps have given way to great progress in solving the above eigenvalue equation on the Hardy space  $H^2(\mathbb{D})$ . We apply similar techniques to the Drury-Arveson space in  $\mathbb{B}_2$  and discuss recent progress on the solution when  $\phi$  has a boundary fixed point and has certain intertwining properties. (Received August 30, 2019)