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Mehdi Nikpour* (mnikpou@rockets.utoledo.edu), Department of Mathematics and Statistics,
The University of Toledo, 2801 W. Bancroft St., Toledo, OH 43606-3390. *Algebraic and
Operator-theoretic properties of Hardy-Hilbert space PTOs.*

From the matricial point of view, moving one step to the southeast, provides us a bounded operator-valued linear transformation on the C^* -algebra of all bounded linear operators on the Hardy-Hilbert space to itself, which enables us first to answer partially a spectral problem raised by Paul R. Halmos, and second to embed Toeplitz operators in an extended setting. In this setting, a new indexed-class of Hardy-Hilbert operators, namely Parametric Toeplitz Operators (PTOs), is defined, and some of their Brown-Halmos type algebraic and operator-theoretic properties are studied. At the end, some Toeplitz and Hankel-type operator-equations are considered and solved. (Received September 17, 2011)