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Vladimir Bolotnikov*, vladi@math.wm.edu, Williamsburg, VA 23185-8795, and **Joseph A Ball**. *Characteristic functions of row contractions: unitary equivalence and coincidence.*

The Sz.-Nagy-Foias characteristic function of a Hilbert space contraction T turns out to be a complete unitary invariant of T in case T is completely nonunitary. Popescu introduced the notion of the characteristic function of a row contraction and showed that it is a complete unitary invariant of a row contraction in the completely non-coisometric case. The commutative version of this result appears in a more recent Bhattacharyya-Eschmeier-Sarkar paper. In the talk, we will present these results from a different point of view (using de Branges-Rovnyak type realizations based on the Agler decompositions for a characteristic function) and discuss what happens or what may happen beyond the completely noncoisometric case. This is the joint work with J.A. Ball. (Received September 21, 2011)