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Dmitry Khavinson* (dkhavins@usf.edu), 4202 E. Fowler Ave, University of South Florida,
Department of Mathematics, Tampa, FL 33620. *What is an "inner function"?* Preliminary report.

The concept of an inner function has been a focal point of function theoretic operator theory since the celebrated Beurling theorem characterizing invariant (with respect to the unilateral shift) subspaces in Hardy spaces in the unit disk. In the 1990s it was extended to Bergman spaces where however Beurling's theorem fails. Since 1960s many plausible ways of extending the notion of an inner function were pursued in the context of Hardy, Bergman and other spaces of analytic functions in a more general setting than the unit disk: multiply connected domains, Riemann surfaces and several variables.

We shall discuss some of the previous results and more recent viewpoints and developments. (Received September 03, 2017)