1097-47-174 **Eva A. Gallardo-Gutierrez*** (eva.gallardo@mat.ucm.es), Departamento de Análisis Matemático, Facultad de Matemáticas, Universidad, Complutense de Madrid, Plaza de Ciencias 3, 28040 Madrid, Spain, and **Carl C. Cowen** (ccowen@math.iupui.edu), Department of Mathematical Sciences, Indiana University-Purdue University, Indianapolis, Indianapolis, IN IN 46202. *Rota's universal operators*.

The *Invariant Subspace Problem* for Hilbert spaces is a long-standing question and the use of universal operators in the sense of Rota has been one tool for studying the problem. The best known universal operators have been adjoints of analytic Toeplitz operators or unitarily equivalent to them. We present many examples of Toeplitz operators whose adjoints are universal operators and exhibit some of their common properties. Some ways in which the invariant subspaces of these universal operators interact with operators in their commutants are given. Special attention is given to the closed subalgebra, not always the zero algebra, of compact operators in their commutants. (Received January 21, 2014)