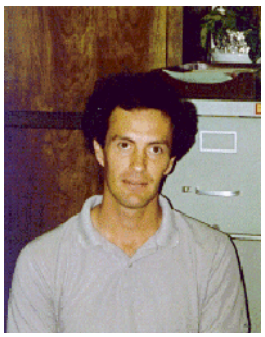

John R. AKEROYD (jakeroyd@comp.uark.edu), Department of Mathematical Sciences, University of Arkansas, Fayetteville, AR 72701-1201, USA, ***Some notes on the index of the shift.***

ABSTRACT. If M is a closed invariant subspace for the shift on the Hardy space H^2, then, by Beurling's Theorem, the codimension of zM in M is 1. In contrast, for any natural number n (and for n equal to infinity) there is a closed invariant subspace M for the shift on the Bergman space A^2 such that the codimension of zM in M is n. We examine the history of, and some recent results concerning, the conjecture that if $P^2(\mu)$ is an irreducible Hilbert space of analytic functions in the disk, then $P^2(\mu)$ shares the aforementioned property of H^2 precisely when $\mu(z : |z| = 1) > 0$.