

1086-47-387

Raul E. Curto, Department of Mathematics, The University of Iowa, Iowa City, IA 52242, and
George R. Exner* (exner@bucknell.edu), Department of Mathematics, Bucknell University,
Lewisburg, PA 17837. *Finding some Berger measures*. Preliminary report.

The moments of a Hilbert space weighted shift W with weight sequence $\alpha_0, \alpha_1, \dots$ are defined by $\gamma_0 = 1$, $\gamma_k = \gamma_{k-1} \cdot \alpha_{k-1}^2$ ($k = 1, 2, \dots$). If W is subnormal it has a Berger measure (supported on $[0, \|W\|^2]$ and with moments matching the moments of W). We consider techniques for determining concretely the Berger measure for certain shifts known to be subnormal, illustrating with the surprising measure for the shift obtained by taking the square root of each weight of the familiar Bergman shift (which itself has the simple Berger measure $1 \cdot dt$ on $[0, 1]$). (Received August 28, 2012)