

1116-47-385

**Pamela Gorkin\*** (pgorkin@bucknell.edu), Department of Mathematics, Bucknell University, Lewisburg, PA 17837, and **Brett D. Wick**. *Thin Sequences and Model Spaces*.

Let  $(z_n)$  be a sequence in the open unit disk and  $T_p$  an operator taking an  $H^p$  function  $f$  to the sequence  $(f(z_n)(1-|z_n|)^{1/p})$ . Shapiro and Shields found conditions for the sequence to be interpolating; e.g, the range  $T_p(H^p)$  equals the sequence space  $\ell^p$  and the condition is Carleson's condition:

$$\inf_k \prod_{n \neq k} \left| \frac{z_k - z_n}{1 - \overline{z_n} z_k} \right| \geq \delta > 0.$$

We consider interpolating sequences for model spaces,  $K_\theta := H^2 \ominus \theta H^2$ , associated with an inner function  $\theta$ . If we have a sequence for which the restriction of  $T_2$  maps  $K_\theta$  onto  $\ell^2$ , then  $T_2$  will map  $H^2$  onto  $\ell^2$ . For which sequences can we be sure that if  $T_2 : H^2 \rightarrow \ell^2$  is surjective, then the restriction  $T_2 : K_\theta \rightarrow \ell^2$  is surjective?

We answer this for the class of *thin sequences* – interpolating sequences for which  $\lim_{k \rightarrow \infty} \prod_{j: j \neq k} \left| \frac{z_j - z_k}{1 - \overline{z_j} z_k} \right| = 1$ . (Received August 29, 2015)