983-46-1069

Judith A Packer* (packer@euclid.colorado.edu), Department of Mathematics, University of Colorado, Campus Box 395, Boulder, CO 80309. An analogue of the Bratteli-Jorgensen loop group action for m-systems in the GMRA setting. Preliminary report.

O. Bratelli and P. Jorgensen have developed a loop group action to analyze *m*-systems and the corresponding multiresolution analyses associated to dilation by N and translation by \mathbb{Z} on $L^2(\mathbb{R})$. We discuss possible extensions of their construction to the generalized multiresolution analysis setting. This work is joint with L. Baggett, P. Jorgensen, and K. Merrill. (Received September 29, 2002)