



**Guido WEISS** (guido@math.wustl.edu), Department of Mathematics, Washington University, St. Louis, MO 63130, USA, *A unified approach for characterizing reproducing systems in  $L^2$ .*

ABSTRACT. Many systems of functions obtained by letting various Dilations, Translations and Modulation operators act on a single or finite family of functions in  $L^2$  have been introduced that form an orthonormal basis (or a more general spanning set) for  $L^2$ . These include the Affine systems (wavelets), the Gabor systems and many other similar spanning sets. We shall describe a general approach that characterizes all these

systems.