

1023-46-663

Marius Ionescu and **Paul S. Muhly*** (pmuhly@math.uiowa.edu), Department of Mathematics,
University of Iowa, Iowa City, IA 52242. *Groupoid Methods in Wavelet Analysis*.

We will discuss how the Deaconu-Renault groupoid attached to a local homeomorphism of a compact Hausdorff space may be used to give a new perspective on the work of Bratteli, Jorgensen, Dutkay and their collaborators that connects the theory of wavelets and fractals to the representation theory of the Cuntz algebra. (Received September 20, 2006)