

1014-47-1628

**Victor Kaftal\*** ([kaftal@math.uc.edu](mailto:kaftal@math.uc.edu)), Department of Mathematical Sciences, University of Cincinnati, PO Box 210025, Cincinnati, OH 45221-0025, and **David Larson** and **Shuang Zhang**.  
*Operator-valued frames over Hilbert  $C^*$ -modules*. Preliminary report.

We introduce the notion of operator-valued frames over Hilbert  $C^*$ -modules and study its various properties. A natural application is to (vector) frames of infinite multiplicity and in particular to subrepresentations of the left regular representation with infinite multiplicity of a discrete group. In the case of ICC groups (factorial case) we prove the norm-connectedness of the operator-valued frames. (Received September 28, 2005)