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Gestur Olafsson* (olafsson@math.lsu.edu), Department of Mathematics, Louisiana State University, Baton Rouge, LA 70803, and **Mihaela Dobrescu**. *Wavelets, multiresolution analysis and finite reflexion groups.*

We will discuss construction of wavelets in higher dimension satisfying some symmetry conditions with respect to finite reflection groups. We will also discuss the how this can lead to multiresultion analysis in higher dimensions. (Received September 27, 2005)