983-47-616 **Ola Bratteli*** (bratteli@math.uio.no), Department of Mathematics, University of Oslo, PB 1053 Blindern Oslo, Norway. *Global structure of the scaling-wavelet variety.*

Some general results from the recently published book "Wavelets Through the Looking Glass. The World of the Spectrum" by Ola Bratteli and Palle E.T.Jorgensen will be presented.In particular the set of wavelet-scaling functions with fixed compact support has the structure of a compact algebraic variety, and the connected components of the locally compact union over all supports of these varieties are indexed by the group Z of integers in a natural manner. Using a result of Garrigos, the integer index of an component can be related to the first moment of the square of any wavelet function in the component. (Received September 16, 2002)