1067-60-1122 **George C Papanicolaou*** (papanico@math.stanford.edu), Department of Mathematics, Stanford University, Stanford, CA 94305. *Correlation based imaging.*

I will discuss passive array imaging where the echoes recorded are generated by noise sources in the ambient environment. The location of reflectors is done by an image function that uses cross correlations of the recorded signals. I will discuss the resolution of images obtained this way as well as signal to noise ratio issues that can be a limiting factor to the this kind of imaging methods. (Received September 19, 2010)