1116-VC-2245 **Max K Black*** (max.black45@yahoo.com) and **Jonas D'Andrea**. *Fractal Image Compression Algorithms and Their Application to Steganography.*

Significant research on various forms of information hiding has been directed towards cryptography. However, an alternative to cryptography is steganography using different image compression techniques. We discuss employing wavelet image compression techniques where the wavelet transform itself acts as the "key" to hiding our information. We investigate a lesser known class of fractal wavelets, first introduced by Dutkay and Jorgensen, as the basis for this image compression. Specifically, we consider wavelets using a dilation by 3 including a two-dimensional Cantor set, and "rotated" Cantor set. We compare these fractal transforms to the Haar wavelet and Daubechies wavelet transforms, with steganography as our goal. (Received September 22, 2015)