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Ivan W Selesnick* (selesi@poly.edu), Polytechnic University, Electrical and Computer Engineering, 6 Metrotech Center, Brooklyn, NY 11201. *Analytic Oriented Wavelet Frames and Applications.*

In this talk we describe wavelet frames generated by multiple wavelets. The wavelets are designed so that half of the wavelets are approximately the Hilbert transform of the remaining wavelets. Consequently, the wavelets can be both oriented (directional) and approximately analytic. Expansive transforms based on these wavelets have been applied to 3D and 4D medical PET data.

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