1096-00-1604 **Saliha Pehlivan*** (salihapehlivan@gmail.com), FL. *Linearly Connected Sequences and Spectrally Optimal Dual Frames for Erasures.*

In the case that a frame is prescribed for applications and erasures occur in the process of data transmissions, the question of characterizing optimal dual frames naturally arises. If iterations are allowed in the reconstruction process of the signal vector, then spectral radius measurement for the error operators is more appropriate then the operator norm measurement. We obtain a complete characterization of spectrally oneerasure optimal dual frames in terms of the redundancy distribution of the prescribed frame. Our characterization relies on the connection between erasure optimal frames and the linear connectivity property of the frame. We prove that the linear connectivity property is equivalent to the intersection dependence property, and is also closely related to the well-known concept of k-independent set. Additionally we also establish several necessary and sufficient conditions for the existence of an alternate dual frame to make the iterated reconstruction to work. (Received September 16, 2013)