1041-42-256   **Jean-Pierre Gabardo*** (gabardo@mcmaster.ca), Department of Mathematics and Statistics, McMaster University, 1280, Main Street West, Hamilton, Ontario L8S 4K1, Canada. *Weighted irregular Gabor and wavelet systems.* Preliminary report.

We will present recent characterization results for tight frames and dual pairs associated with weighted irregular Gabor and wavelet systems in the settings of Euclidean spaces and the finite group $\mathbb{Z}_N$. Applications of these results will be also discussed. (Received August 12, 2008)