Azita Mayeli* (amayeli@citytech.cuny.edu), Room N707, 300 Jay Street, Brooklyn, NY 11201. Homogeneous Besov spaces on the stratified Lie groups as generalized coorbit spaces. Preliminary report.

In this talk, we first introduce a notion of homogeneous Besov space on the stratified Lie groups in terms of a Calderón type decomposition into band-limited tempered distributions, and then we prove a characterization and atomic decomposition for these spaces in terms of band-limited wavelets. We also show that these Besov spaces are generalized coorbit spaces that were developed by J. Christensen and G. Ólafsson. We conclude this talk with some open questions related to our studies.

This talk is a summary of two joint works: with Hartmut Führ and with Jens G. Christensen, Gestur Ólafsson. (Received September 21, 2010)