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Azita Mayeli* (amayeli@qcc.cuny.edu). *Bracket map for the Heisenberg group and the characterization of cyclic subspaces*. Preliminary report.

The bracket map was originally considered in [1] for locally compact abelian groups. In this work we extend the study of bracket maps to the non-commutative setting, providing characterizations of bases and frames for cyclic subspaces of the Heisenberg group. We also indicate how to generalize these results to non-abelian nilpotent Lie groups whose irreducible representations are square integrable modulo the center. This is a joint work with Davide Barbieri and Eugenio Hernández.

[1] E. Hernández, H. Šikić, G. Weiss, E. Wilson, *Cyclic subspaces for unitary representations of LCA groups: generalized Zak transforms*. Colloq. Math. 118(1):313-332 (2010). (Received February 18, 2013)