1129-20-156 **Matias Carrasco*** (mcarrasco@fing.edu.uy), Instituto de Matematica y Estadistica, Facultad de Ingenieria, Julio Herrera y Reissig 565, 11300 Montevideo, Montevideo, Uruguay, and
Emiliano Sequeira (esequeira@cmat.edu.uy), Instituto de Matematica y Estadistica, Facultad de Ingenieria, Julio Herrera y Reissig 565, 11300 Montevideo, Montevideo, Uruguay.

Quasi-isometry invariants associated to Heintze groups.

Negatively curved homogeneous manifolds were characterized by Heintze in 1974. Each such manifold is isometric to a solvable Lie group equipped with a left invariant metric, and the group is a semi-direct product of N times the reals R, where N is a nilpotent simply connected Lie group, and the action of R on N is given by a derivation whose eigenvalues all have positive real parts. Such a group is called a Heintze group.

An important conjecture regarding the large scale geometry of (purely) real Heintze groups states that two such groups are quasi-isometric if, and only if, they are isomorphic.

In this talk I will describe some quasi-isometry invariants associated to the derivation of a Heintze group, and I will give some applications to the case where N is a Heisenberg group.

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