

## Some remarks on viscosity/weak solutions to second order equations in the Heisenberg group

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Workshop in Probability and PDE-Buenos Aires-20, 21 y 22 de Noviembre

In this talk, we shall discuss different issues related to the theory of viscosity and weak solutions for second order equations in the sub-Riemannian setting of the Heisenberg group. In particular, we shall consider recent results on existence, uniqueness (via comparison principles) and regularity of viscosity solutions from one hand and, on the other hand, related issues for weak or energy solutions. Applications to the relation between these notions of solutions and to Radó properties will be given.

References:

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- Ochoa, P. and Ruiz J. A. (2017). Existence and uniqueness results for linear second-order equations in the Heisenberg group. *Annales Academiae Scientiarum Fennicae Mathematica* **42**: 1063-1085.
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