

CMM PDE Seminar

Speaker: Antonio Siconolfi (Sapienza University of Rome, Italia).

Title: Hamilton–Jacobi problems on graphs and networks.

Abstract: The talk presents some Hamilton–Jacobi problems on networks. The peculiarity is that the Hamiltonians on different arcs are unrelated, without any compatibility condition at the vertices. Nevertheless, uniqueness result and comparison principles can be obtained, suitably exploiting the geometry of the network,

Our approach consists in associating to the problem on the network a discrete or semidiscrete equation posed on an underlying abstract graph. This allows testing separately the equations on any arc and proving comparison results without using the doubling variable technique. This is beneficial in the numerical approximation as well.

April 24, 2023 at 12 Santiago time

To be held in person at Sala de seminarios DIM, 5th floor, Beauchef 851, and online via zoom:

El link para acceder por zoom:

<https://us06web.zoom.us/j/86136029293?pwd=bXpWVURjSXYvOE81OThJZHptcINxdz09>

For further information, see our webpage: <https://eventos.cmm.uchile.cl/pdeseminar/>

