

CMM PDE Seminar

Speaker: Maria Fernanda Espinal Florez, (PUC)

Title: A gluing construction of singular solutions for a fully non-linear equation in conformal geometry.

Abstract:

We study construction of a complete non-compact Riemannian metrics with positive constant α_2 -curvature, on the sphere S_n with a prescribed singular set Λ given by a disjoint union of closed submanifolds whose dimension is positive and strictly less than $n - \sqrt{n} - 22$.

This is a fully non-linear problem, nevertheless, we show that the classical gluing method of Mazzeo-Pacard for the scalar curvature still works in this setting since the linearized operator has good mapping properties in weighted spaces. A necessary condition is that $2 \leq 2k < n$.

El link para acceder a la reunión de zoom:

<https://us06web.zoom.us/j/85731103116?pwd=fEHshbCfXOLLkHr9x86UQYwiQ3l16A.1>

October 16, 2023 at 12 Santiago time.

Venue: Online via Zoom / Sala de Seminarios 5th floor, Beauchef 851

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

