Analisys Session

SOME ELLIPTIC PROBLEMS OF CONCAVE AND CONVEX TYPE IN $\mathbb{R}^n$ WITH BOUNDED WEIGHT.

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17h20 - 18h00

Math Department - SALA B

Abstract.

In this talk we present recent results involving elliptic problems with sublinear growth at the origin and superlinear behavior at infinity with bounded weights in $\mathbb{R}^n$. Problems of this nature present several difficulties to deal with variationally, once that the energy functional is not, a priori, well defined. We overcome this difficulty by obtaining a first solution, via the sub and super solution technique. Understanding the behavior at infinity of this first solution, we are able to obtain a second solution via variational methods.

Joint work with Pedro Ubilla (USACH), Juan Arratia(USACH) and Diego Ferraz (UFRN).