

# Interior estimates for fully nonlinear equations with unbalanced degeneracy

Giane Casari Rampasso  
Universidade Federal de Itajubá - UNIFEI

`gianecr@unifei.edu.br`

## **Abstract**

The purpose of this work is to discuss interior regularity estimates for solutions of a class of problems governed by double degenerate fully nonlinear elliptic operators and variable order. One of the main signatures of this model is its interplay between two different kinds of degeneracy laws of variable order, according to the null set of a non negative modulating function. Our findings include Hölder continuity of the gradient and geometric non-degeneracy properties of solutions.

This is a joint-work with E.C. Bezerra Júnior (IMECC-Unicamp), J.V. da Silva (IMECC-Unicamp) and G.C. Ricarte (UFC).