



SEMINÁRIO

Análise e Equações Diferenciais

7 março 2024 | 13:30 | sala 6.2.33

Variational Problems on Measure Spaces with Constraints

Carlos N. Rautenberg

(George Mason University)

ABSTRACT:

We consider a class of variational problems involving partial differential operators on non-standard vector-valued measure spaces with divergences (represented by measures or by functions). This class of problems arise from the study of the growth of heterogeneous sand piles and via (Fenchel) duality of the aforementioned models. Further, mixed boundary conditions are in place and these are established by means of a normal trace characterization of the vector measure. We determine existence of solutions, stability and strong duality results. We finalize the talk with numerical tests.

