
OPTIMAL DESIGN PROBLEMS

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Several results devoted to obtain a measure representation for functionals arising in the context of optimal design problems will be presented. In particular I will focus on models whose energy satisfies non-standard growth conditions or aims at describing fractures and plasticity. In the above analysis the presence of a perimeter penalization term play a crucial role.

The talk is based on joint works with Ana Cristina Barroso, Graça Carita, José Matias, Marco Morandotti and Rodica Toader.

Keywords: non-standard growth conditions, optimal design, sets of finite perimeter.