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## SEMINÁRIO DE ANÁLISE E EQUAÇÕES DIFERENCIAIS

Dia 4 de Maio (quinta-feira), às 13h30, sala 6.2.38

# Multiplicity results for a class of asymptotically linear systems of second-order ordinary differential equations

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**Abstract:** We study multiplicity of solutions to an asymptotically linear Dirichlet problem associated with a planar system of second order ordinary differential equations. The multiplicity result is expressed in term of the Maslov indexes of the linearizations at zero and infinity: the gap between the Maslov indexes provides a lower estimate on the number of solutions. The proof is developed in the framework of the shooting methods and it is based on the concepts of phase angles and moments of verticality.

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