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# Seminário Luiz Adauto Medeiros de Análise e EDP

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25/03/2026 às 12:10h

IM-UFRJ, CT sala C-116

## A Critical Neumann problem with anisotropic p-Laplacian

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**Resumo:** We are concerned with the existence of a positive solution of a critical Neumann problem involving the anisotropic p-Laplacian on a  $C^1$  bounded domain inside a convex open cone in  $\mathbb{R}^N$ . Besides the critical growth, the main challenge to succeed with a variational approach, where the strong convergence of a bounded (PS) subsequence needs to be proved, is to deal with anisotropic norms in the absence of a Tartar's type inequality. The solution we obtain is a bounded  $C^{1,\alpha}(\Omega)$  function which is strictly positive inside the domain. This is a joint work with Olimpio Miyagaki (UFSCar) and Alânnio Nóbrega (UFCG).



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