

Centro de Matemática da Universidade do Minho

Universidade do Minho Escola de Ciências Centro de Matemática

Seminário de Análise

- Date :: 2013 September 12, 3:00pm
- Place :: Seminars Room of DMA (B4009), Campus of Gualtar
- Speaker :: Prof. Jean Mawhin, Université Catholique de Louvain, Louvain-la-Neuve, Belgique
 - Title :: Nonlinear problems involving the mean extrinsic curvature operator
- Abstract :: We survey some results on the existence and multiplicity of positive solutions for Dirichlet problems associated to equations of the form

$$\nabla \cdot \left(\frac{\nabla u}{\sqrt{1 - \|\nabla u\|^2}} \right) = f(x, u)$$

involving the mean extrinsic curvature operator in a Minkowski space. The cases of a general domain $\Omega \subset \mathbb{R}^N$ and of radial solutions in a ball are both considered.