



*Institut d'Analyse et Calcul Scientifique (IACS)  
Section Mathématiques*

***SEMINAIRES D'ANALYSE***

- ***VENDREDI 04 avril 2008 à 15h.15 à la salle MA 30***  
*Monsieur Feng ZHOU (East China Normal University, Shanghai) donnera une conférence sur le thème:*

**"BUBBLING SOLUTIONS FOR AN ANISOTROPIC EMDEN-FOWLER EQUATION"**

Abstract: We consider the following anisotropic Emden-Fowler equation  $\nabla(a(x)\nabla u) + \epsilon^2 a(x)e^u = 0$  in  $\Omega$ ,  $u = 0$  on  $\partial\Omega$  where  $\Omega$  is a bounded smooth planar domain and  $a(x)$  is a positive smooth function. We investigate the effect of anisotropic coefficient  $a(x)$  on the existence of bubbling solutions. We show that the existence of multi-bubbles can be occurred which shows a striking difference with the isotropic case ( $a(x) \equiv \text{Constant}$ ). This is based on the joint work with J.C.Wei and D.Ye.

Lausanne, le 10 mars 2008  
CS/mg