

Meeting: 1004, Bowling Green, Kentucky, SS 12A, Special Session on Partial Differential Equations and Their Applications

1004-35-111 **Peihao Zhao*** (zhaoph@lzu.edu.cn), Department of Mathematics, Lanzhou University, 730000 Lanzhou, Gansu, Peoples Rep of China, and **Chengkui Zhong**. *Positive solutions of elliptic equations involving both supercritical and sublinear growth.*

Positive radial solutions of elliptic equations on the unit ball with the nonlinearity involving both supercritical and sublinear growth are analysed as their supremum norm tend to infinity. It is shown that they converge, uniformly away from the origin, as well as in H_0^1 , to the unique singular solution. So, an open problem is answered negatively. And, we show a brief description of the set of positive solutions of the problem. (Received January 20, 2005)