1015-35-278 **Yinbin Deng** (ybdeng@public.wh.hb.cn), **Yi Li*** (yi-li@uiowa.edu) and **fen Yang** (maticyang@126.com). *On the Stability of the Positive Steady States for a Nonhomogeneous Semilinear Cauchy Problem.*

This talk is contributed to the Cauchy problem $\frac{\partial u}{\partial t} = \Delta u + K(|x|)u^p + \mu f(|x|)$ *in* $R^n \times (0,T)$, $u(x,0) = \varphi(x)$ *in* R^n.

The monotonicity and stability of the positive radial steady states, which are positive solutions of $\Delta u + K(|x|)u^p + \mu f(|x|) = 0$, are discussed, μ is some positive constant, $0 \leq f \in C^1(R^n \backslash \{0\})$, $K(x)$ is a given local Hölder continuous function in $R^n \backslash \{0\}$, and $\varphi \not\equiv 0$ is a bounded non-negative continuous function in R^n. (Received February 07, 2006)