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Coauthors: Eun Kyoung Lee and R. Shivaji

## INFINITE SEMIPOSITONE PROBLEMS

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We analyze the positive solutions to singular boundary value problems of the form

$$\begin{aligned} -\Delta u &= \lambda \frac{f(u)}{u^\alpha}; x \in \Omega \\ u &= 0; x \in \partial\Omega, \end{aligned}$$

where  $\lambda$  is a positive parameter,  $\Omega$  is a bounded region in  $R^n, n \geq 1$  with smooth boundary  $\partial\Omega$ ,  $\alpha \in (0, 1)$ ,  $\Delta$  is the Laplacian operator and  $f$  is continuous with  $f(0) < 0$ . Note that  $g(s) = \frac{f(s)}{s^\alpha} \rightarrow -\infty$  as  $s \rightarrow 0^+$  (Infinite Semipositone case). We establish our results by the method of sub-super solution. We also establish extensions to the  $p$ -Laplacian case as well as to systems.

MATHEMATICS STATISTICS DEPARTMENT, MISSISSIPPI STATE UNIVERSITY  
*E-mail address:* jy79@msstate.edu