1056-35-1615 **Jaffar Ali*** (jahameed@fgcu.edu), #450, Library, Florida Gulf Coast University, 10501 FGCU Blvd. S., Fort Myers, FL 33965, and **Ratnasingham Shivaji** (shivaji@ra.msstate.edu), Department of Mathematics, Mississippi State University, Mississippi State, MS 39759. *Multiple positive solutions for a class of p-q-Laplacian systems with multiple parameters and combined nonlinear effects.*

Consider the system

$$\begin{cases} -\Delta_p u &= \lambda_1 f(v) + \mu_1 h(u), \text{ in } \Omega \\ -\Delta_q v &= \lambda_2 g(u) + \mu_2 \gamma(v), \text{ in } \Omega \\ & u = 0 = v, \text{ on } \partial\Omega \end{cases}$$

where $\Delta_s z = div(|\nabla z|^{s-2}\nabla z); s > 1, \lambda_1 > 0, \lambda_2 > 0, \mu_1 \geq 0$ and $\mu_2 \geq 0$ are parameters and Ω is a bounded domain in R^n with smooth boundary $\partial\Omega$. For some classes of non-negative monotone functions f, g, h and γ which satisfy

$$\lim_{x\to\infty} \frac{f(M[g(x)]^{1/q-1})}{x^{p-1}} = 0, \ \forall M > 0,$$

$\lim_{x\to\infty} \frac{h(x)}{x^{p-1}} = 0$ and $\lim_{x\to\infty} \frac{\gamma(x)}{x^{q-1}} = 0$, we discuss the existence of multiplicity of positive solutions for certain range of parameters $\lambda_1, \mu_1, \lambda_2$ and μ_2. We use the method of sub- and super-solutions to establish our results.

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