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The Existence of Triple Positive Solutions of Nonlinear Four-point Boundary Value Problem  
with p-Laplacian

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**Abstract:** This paper deals with the multiplicity results of positive solutions of one-dimensional singular p-Laplace equation  $(\varphi_p(u'(t)))'+a(t)f(t,u(t),u'(t))=0$ ,  $0<t<1$  subject to the nonlinear boundary conditions  $\alpha\varphi_p(u(0))-\beta\varphi_p(u'(\xi))=0$ ,  $\gamma\varphi_p(u(1))+\delta\varphi_p(u'(\eta))=0$ , where  $\varphi_p(x)=|x|^{p-2}x$ ,  $p>1$ . By using the Avery-Peterson fixed point theorem, sufficient conditions for the existence of at least three positive solutions to the boundary value problem mentioned above are obtained.

**Key Words:** p-Laplacian; Avery-Peterson fixed-point theorem; positive solution; boundary value problem

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