Bo Yang*, 1000 Chastain Road, Kennesaw, GA 30144. Positive Solutions for a Fourth Order Boundary Value Problem. Preliminary report.

We consider a boundary value problem for the fourth order beam equation. Some a priori estimates to positive solutions for the boundary-value problem are obtained. Sufficient conditions for the existence and nonexistence of positive solutions for the boundary value problem are established. (Received February 28, 2017)