1067-35-1317 Keng Deng* (deng@louisiana.edu), Department of Mathematics, University of Louisiana at Lafayette, Lafayette, LA 70504, and Zhihua Dong (zxd5200@louisiana.edu), Department of Mathematics, University of Louisiana at Lafayette, Lafayette, LA 70504. Blow-up for A Parabolic System with Nonlinear Memory.

We consider nonnegative solutions of a parabolic system with nonlinear memory. We establish global existence and global nonexistence results. We also localize the blow-up points. (Received September 20, 2010)