

1092-35-72

Jun Geng* (gengjun@lzu.edu.cn), School of Mathematics and Statistics, Lanzhou University, Lanzhou, 730000, Peoples Rep of China, and **Zhongwei Shen** (zshen2@uky.edu), Department of Math., University of Kentucky, Lexington, KY 40506. *Uniform Regularity Estimates in Parabolic Homogenization.*

We consider a family of second-order parabolic systems in divergence form with rapidly oscillating and time-dependent coefficients, arising in the theory of homogenization. We obtain uniform interior $W^{1,p}$, Hölder, and Lipschitz estimates as well as boundary $W^{1,p}$ and Hölder estimates, using compactness methods. (Received July 28, 2013)