1023-35-1165   **Shijin Ding**, South China Normal University, Guangzhou, Guangdong 510631, Peoples Rep of China, and **Changyou Wang*** (`cywang@ms.uky.edu`), Department of Mathematics, University of Kentucky, Lexington, KY 40506. *Finite time singularity of Landan-Lifshitz-Gilbert equation.* Preliminary report.

In this paper, we will discuss the existence of finite time blow up for the Landau-Lifshitz-Gilbert equation in dimensions 3 and 4, which is a model equation governing the dynamics of magnetic moment in the continum theory of ferromagnetisim. (Received September 25, 2006)