1046-14-1179   **Yisha Peng*** (`pengpche@gmail.com`), Lantian 5-1077, ZJG Campus, Zhejiang University, Hangzhou, Zhejiang 310058, Peoples Rep of China. *A Linear Algebraic Proof of Demailly and Skoda's Theorem.*

Demailly and Skoda's theorem is very famous and important in algebraic geometry area. However, the traditional proof of this theorem requires highly advanced mathematical skills such as Fourier analysis. Also, some prior knowledge of Nakano Positive, Griffths Positive and vector bundle are required. In our paper, we translate this complicated algebraic geometry theorem into simple matrix language. We also transform the proof of this theorem into the proof of a hermitian matrix's positiveness. In the end, we give an elementary proof of this transformed one. In this way, even a freshman in college can understand this complicated theorem and the beautiful proof of it. (Received September 15, 2008)