The expansion constant of a simple graph $G$ of order $n$ is defined as

$$h(G) = \min_{0 < |S| \leq \frac{n}{2}} \frac{|E(S, \overline{S})|}{|S|}$$

where $E(S, \overline{S})$ denotes the set of edges in $G$ between the vertex subset $S$ and its complement $\overline{S}$. An expander family is a sequence $\{G_i\}$ of $d$-regular graphs of increasing order such that $h(G_i) > \epsilon$ for some fixed positive integer $d$ and $\epsilon > 0$. Existence of such family is known in literature, but construction is non-trivial. A folklore states that there is no expander family of circulant graphs only. In this talk, we provide a simple proof of this fact by first estimating the second largest eigenvalue of a circulant graph, and then employing the Cheeger inequality. (Received August 28, 2009)