1107-35-274   **Nguyen Lam*** (`nhlam@pitt.edu`), Department of Mathematics, 301 Thackeray Hall, Pittsburgh, PA 15260. *Sharp Moser-Trudinger-Adams inequalities and Applications to PDEs.*

In this talk, we will discuss the border-line cases of the Sobolev embedding theorems and their applications in partial differential equations. In particular, we will describe the sharp Moser-Trudinger and Adams inequalities and their best constants for the inequalities to hold on Euclidean spaces and Heisenberg groups. Recent development in this direction will be surveyed. This talk is based on joint works with Guozhen Lu and Hanli Tang. (Received January 17, 2015)