1108-35-309 **Nguyen Lam*** (nhlam@pitt.edu), Department of Mathematics, 301 Thackeray Hall, Pittsburgh, PA 15260. Sharp Moser-Trudinger and Adams inequalities.

Moser-Trudinger and Adams inequalities have received important attention in recent years. In this talk, we present some recent development on sharp Moser-Trudinger type inequalities on first order Sobolev spaces and sharp Adams type inequalities on high order Sobolev spaces on both Euclidean spaces and Heisenberg groups. Since the symmetrization argument is not available on these settings, we propose a rearrangement-free method to study these sharp inequalities. This talk is based on joint works with Guozhen Lu and Hanli Tang. (Received January 17, 2015)