

1014-43-1721 **Ismail Kombe*** (ikombe@okcu.edu), Mathematics Department, Oklahoma City University, 2501 N. Blackwelder, Oklahoma City, OK 73106-1493. *Sharp Hardy-type inequalities and uncertainty principle inequality on Carnot Groups.*

We present sharp Hardy-type inequalities on Carnot groups with homogeneous dimension 3 and higher. A simple argument based on sharp Hardy-type inequality is used to obtain uncertainty principle inequality on Carnot groups. (Received September 28, 2005)