1086-11-1516 Arnab Saha* (arnab.saha@anu.edu.au), John Dedman Building, No-27, Australian National University, Canberra, ACT 0200, Australia. *Differential Modular forms and Hecke Operators*.

Arithmetic jet spaces enlarge the regular algebraic geometry by considering "differential equations" that are satisfied by numbers with respect to a p-derivation δ . Differential modular forms are obtained from the usual modular forms by considering the arithmetic jet spaces on it. We will study the action of the Hecke operators on these differential modular forms. (Received September 23, 2012)