

**Meeting:** 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-05-705      **James Gardner\*** (james@jamesjgardner.com) and **Anant Godbole.** *Pebbling random graphs.* Preliminary report.

Consider a random graph  $G(n, p)$  where  $n = |V(G)|$  and  $p$  is the probability that any edge from the  $\binom{n}{2}$  possible edges is in  $E(G)$ . We determine the pebbling threshold for  $G(n, p)$  as  $n \rightarrow \infty$ . In other words, given  $t$  randomly distributed pebbles we show that for

$$t \gg t_o \ P(G(n, p) \text{ is pebbleable} \rightarrow 1)$$

and

$$t \ll t_o \ P(G(n, p) \text{ is pebbleable} \rightarrow 0),$$

when  $p$  is both fixed and when  $p \rightarrow 0$  at a specified rate. (Received September 28, 2004)