

## Monthly bonuses for a weather forecaster

- ▶ Before the first of the month assign one dollar to the forecaster's bonus.  $b_0 = 1$
- ▶ Forecaster assigns probability  $p_t$  to rain on day  $t$ .
- ▶ If it rains on day  $t$  then  $b_t = 2b_{t-1}p_t$
- ▶ If it does not rain on day  $t$  then  $b_t = 2b_{t-1}(1 - p_t)$
- ▶ At the end of the month, give forecaster  $b_T$