

$$\sum_0^n a_r > t - \bar{r}_n$$

$$\sum_0^n a_r < t - \bar{r}_{n-1} + a_n$$

$$t - \bar{r}_{n-1} + a_n > t - \bar{r}_n$$

$$a_n - \bar{r}_{n-1} > -\bar{r}_n$$

Consider
2 dimensions

p. 71

Exercise 430

$$a_0 + a_1 + \dots + a_{n-1} + a_n + \bar{r}_n - \bar{r}_{n-1} = t$$

~~Prob~~

~~$$\int_0^t dG(t-r) (1 - \sigma_T(r)) dr$$~~

$$\text{Prob} \{ a_0 + a_1 + \dots + a_n + \bar{r}_n - \bar{r}_{n-1} > t \}$$

$$\text{Prob} \{ a_n + \bar{r}_n - \bar{r}_{n-1} > 0 \}$$

$$\left| \bar{r}_n + \bar{r}_{n-1} > -a_n \right|$$

$$\int_{-a_n}^{\infty} \sigma_T(r) dr$$

$$\int_{-a_n}^{\infty} dG(t-r) (1 - \sigma_T(r)) dr$$

MM