$A \alpha N$
$h h \sim$
$exp(1) h$

$$f_H(h) = \exp(-h)$$
(1)
$$F_H(h) = P[H \leq h] = 1 - \exp(-h)$$
(2)
$P n \lambda_s$ **??**

$$n_s = \left\lfloor \lambda_s S \right\rfloor$$
(3)
$\left\lfloor \cdot \right\rfloor \mathcal{S} i S_i \mathcal{S} =$
$\{S_1, S_2, \dots, S_{n_s}\}$
$S_i k_i$
**??**$_d is.pdf$
**??**m$\times$
100m$\lambda =$
$10^{-3}$m$^{-2}$
$\phi$**??**
$S_i \mathcal{U}_i k_i$
$U \mathcal{U}_i =$
$\{U_1, U_2, ..., U_{k_i}\} \mu \sigma^2$
$$f_{X,Y}(x,y)(a){=}f_X(x) f_Y(y)(b){=}\frac{1}{\sqrt{2\pi}\sigma} \exp\left(-\frac{x^2}{2\sigma^2}\right) \cdot \frac{1}{\sqrt{2\pi}\sigma} \exp\left(-\frac{y^2}{2\sigma^2}\right) = \frac{1}{2\pi\sigma^2} \exp\left(-\frac{x^2+y^2}{2\sigma^2}\right)$$
(4)
$(a)(b)$**??**$_x y_p df.pdf$
**??**

$$f_R(r) = \frac{r}{\sigma^2} \exp(-\frac{r^2}{2\sigma^2})$$
(5)
$R$
**??**
$S_i U_k P_{i,k}$**??**

$$P_{i,k} = R_{i,k}^{-\alpha} h_{i,k} P$$
(6)
$R_{i,k} U_k S_i \alpha h_{i,k} U_k S_i h_{i,k} \sim$
$exp(1) P$**??**
$S_i U_k$**??**

$$I_{i,k} = \sum_{cS_j \in \mathcal{S} j \neq i} R_{j,k}^{-\alpha} h_{j,k} P$$
(7)
$R_{j,k} U_k S_j \alpha h_{j,k} U_k S_j h_{j,k} \sim$
$exp(1) P$
$S_i U_k$

$$\mathrm{SINR}_{i,k}(a){=}\frac{P_{i,k}}{I_{i,k}+N}(b){=}\frac{R_{i,k}^{-\alpha} h_{i,k} P}{\sum\limits_{cS_j \in \mathcal{S} j \neq i} R_{j,k}^{-\alpha} h_{j,k} P + N}$$
(8)
$S_i \in$
$\mathcal{S}$
$U_k \in$
$\mathcal{U}_i (a)(b)$**????**
**??**

$$\mathrm{SIR}_{i,k}(a){=}P_{i,k}/I_{i,k}(b){=}\frac{R_{i,k}^{-\alpha} h_{i,k}}{\sum\limits_{cS_j \in \mathcal{S} j \neq i} R_{j,k}^{-\alpha} h_{j,k}}$$
(9)
$(a)(b)$**??**
**??**
$S_0 \in$
$\mathcal{S} S_0 r r S_0 h$
$h h \sim$
$exp(1)$
$\lambda T \alpha \sigma$**??**

$$p_c(T,\lambda,\alpha,\sigma)(a){=}P[\mathrm{SINR} > T](b){=}E_r[\mathrm{SINR} > T \mid r](c){=}\int_0^\infty P[\mathrm{SINR} > T \mid r] \frac{r}{\sigma^2} \exp(-\frac{r^2}{2\sigma^2}) \mathrm{d}r$$
(10)