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**Notation**

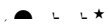
$\mathbb{R}^n$  is the set of  $n$ -dimensional real vectors.  
 $\mathbb{C}^n$  is the set of  $n$ -dimensional complex vectors.  
 $\mathbb{R}^{n \times m}$  is the set of  $n \times m$  real matrices.  
 $\mathbb{C}^{n \times m}$  is the set of  $n \times m$  complex matrices.  
 $\mathbb{R}^n$  is the set of  $n$ -dimensional real vectors.  
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 $\mathbb{C}^{n \times m}$  is the set of  $n \times m$  complex matrices.

### 3 Erdős-Rényi mixture for graphs

△



Table 1



'00

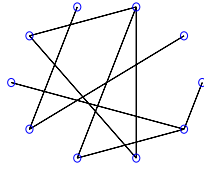
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...

...

...

$(s, \dots, s)$   $\bar{V}$   $\dots$   $(s, \dots, s)$   
 $\{s, \dots, s\}$   $V - \$$   
 $V_L$   $r$   
 $t - V / M$   $t / M$

$$L(X)$$

$$(Z) X$$

$$L(X)$$

$$J(X) = L(X) \pm X(\pm, (\mp) X)$$

**5 Estimation**

$$(Z) X^{\pm} \quad X_L \quad X$$

$$-J(X) \quad L(X)$$

$$X(\mp) \quad (\mp) X$$

$$X-$$

$$(\mp) X-$$

Handwritten notes and scribbles in blue ink, including symbols like '00', '111', and '111'.

$$X$$

$$X$$

$$| < < \pm$$

$$X > |$$

$$X$$

$$00$$

$$00$$

$$L(X)$$

$$00$$

$$00$$

$$\frac{1}{n} \sum_{i=1}^n J(x_i) \pm \frac{1}{n} \sum_{i=1}^n \frac{F_{i,n}}{x_i} J(x_i)$$

$$\frac{1}{n} \sum_{i=1}^n F_{i,n} \left( \frac{1}{x_i} \right) \pm \frac{1}{n} \sum_{i=1}^n F_{i,n} \cdot \frac{1}{x_i}$$

$$\frac{1}{n} \sum_{i=1}^n \left( \frac{1}{x_i} \right) \pm \frac{1}{n} \sum_{i=1}^n \frac{1}{x_i}$$

$$\frac{1}{n} \sum_{i=1}^n \left\{ \frac{1}{x_i} \right\} \pm \frac{1}{n} \sum_{i=1}^n \frac{1}{x_i}$$

**Parameter estimates**

$$\frac{1}{n} \sum_{i=1}^n J(x_i)$$

**Proposition 6** ...  $\{x_i\}$  ...  $J(x)$

$$\frac{1}{n} \sum_{i=1}^n F_{i,n} \pm \frac{1}{n} \sum_{i=1}^n F_{i,n}$$

$$L(Z) = \int_{\mathcal{Z}} p(z) \log p(z) dz = \int_{\mathcal{Z}} p(z) \log \frac{1}{p(z)} dz$$

$$= - \int_{\mathcal{Z}} p(z) \log p(z) dz = - \int_{\mathcal{Z}} p(z) \log p(z) dz$$

$$= - \int_{\mathcal{Z}} p(z) \log p(z) dz = - \int_{\mathcal{Z}} p(z) \log p(z) dz$$

$$L(X, Z) = L(X)$$



