

# DATA ANALYSIS and STATISTICS

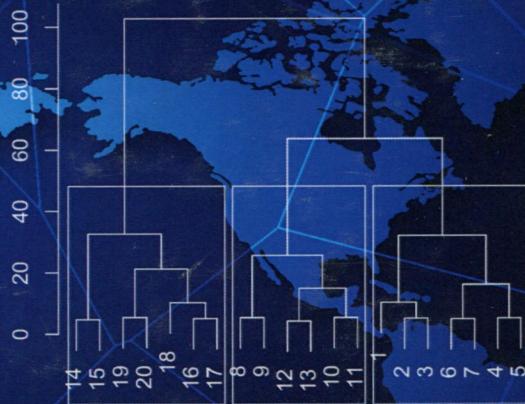
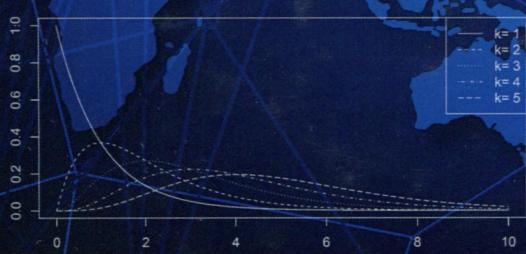
## for Geography, Environmental Science, and Engineering

MIGUEL F. ACEVEDO

$$\mu_x = b\Gamma(1+1/c) = (b/c)\Gamma(1/c)$$

$$\sigma_x^2 = b^2 \left( \Gamma(1+2/c) - (\Gamma(1+1/c))^2 \right)$$

$$\begin{bmatrix} z_{i1} \\ z_{i2} \end{bmatrix} = \begin{bmatrix} 0.33 & 0.62 & 0.74 \\ -0.84 & 0.58 & 0.13 \end{bmatrix} \begin{bmatrix} x_{i1} \\ x_{i2} \\ x_{i3} \end{bmatrix}$$



$$E[Z(\mathbf{x}_0)] = E \left[ \sum_{i=1}^k \lambda_i Z(\mathbf{x}_i) \right] = \sum_{i=1}^k \lambda_i E[Z(\mathbf{x}_i)] = \mu_Z \sum_{i=1}^k \lambda_i$$



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