Abstract: Correlation has been in use widely as a measure of dependence between two random variables. It is a common knowledge that correlation falls in the interval (-1, 1), and this is true when the two variables are normally distributed. What is not well known is the fact if one or both variables is non-normal the range is a proper subset of that interval. The extreme values of the correlation are determined by the Frechet bounds. In this talk we will discuss the range of the correlation for non-normal, in particular for binary variables. We will also study some extensions to multiple random variables and applications to problems in biostatistics.

Monday, September 12 at 3:45 in Roop 103
refreshments at 3:30