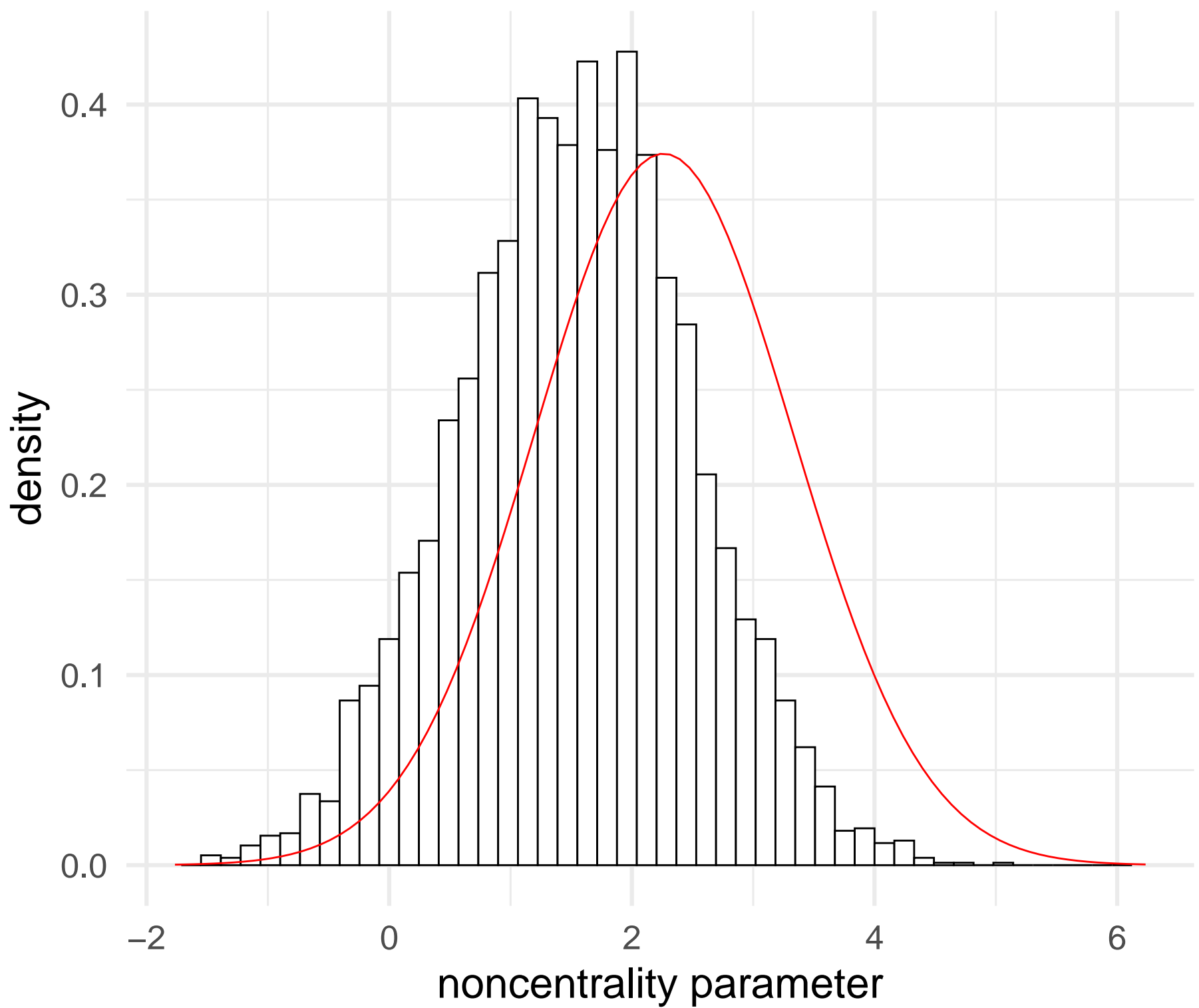histogram of 4739 noncentrality parameters