

The worst case analysis plays an important role in Bayesian decision procedures. The talk is devoted to the design of worst-case distributions in the well-known problem of the best choice, in which a decision maker aims to stop with highest probability at the maximum in a random series. The problem dates back to 60's but was formulated explicitly much later by Ferguson. For sample of size two no worst case distribution exists, but for larger samples there exist distributions which are minimax for any sample size between 2 and any finite bound. The solution will be presented in the form of a game in which an opponent generates the data in a way to make the choice of the guessing player as difficult as possible.