

We consider a limit theorem for the distribution of a r.v.  $Y_n = \arg \max_{1 \leq i \leq n} \{X_i\}$ , where  $X_i$ 's are independent continuous non-negative r.v.'s. The r.v.'s  $X_i, i = 1, \dots, n$ , may be interpreted as the gains of  $n$  players in a game, and the r.v.  $Y_n$  itself as the number of a "winner". In the case of i.i.d.r.v.'s, the distribution of  $Y_n$  is, clearly, uniform on  $\{1, \dots, n\}$ , while when the  $X$ 's are non-identically distributed, the problem becomes more interesting.

(based on joint work with Vladimir Rotar)