In order to find the maximal value $\overline{f}$ such that $\mathrm{Ch}\{\xi_1^2 + \xi_2^2 + \xi_3^2 \geq \overline{f}\} \geq 0.9$, where ξ_1, ξ_2, ξ_3 are hybrid variables defined as

$$\begin{aligned}
\xi_1 &\sim \mathcal{EXP}(\rho_1), \text{ with } \rho_1 = (1, 2, 3), \\
\xi_2 &\sim \mathcal{EXP}(\rho_2), \text{ with } \rho_2 = (2, 3, 4), \\
\xi_3 &\sim \mathcal{EXP}(\rho_3), \text{ with } \rho_3 = (3, 4, 5),
\end{aligned}$$

we perform the hybrid simulation with 5000 cycles and obtain $\overline{f} = 2.05$.