

Biggest equal sized circles inside a unity circle

Solve the following optimization problem

Allocate N equal sized circles inside a unity circle. Try to maximize their radius.

$$\begin{aligned} & \max R \\ \forall_{i,j} \quad & (x_i - x_j)^2 + (y_i - y_j)^2 \geq (R + R)^2 \\ \forall_i \quad & (x_i - 1)^2 + (y_i - 1)^2 \leq (1 - R)^2 \end{aligned}$$

