

Biggest circle on a surface with obstacles

Solve the following optimization problem

Find the biggest circle on a surface with a number of obstacles (center and radius)

$$\min \pi R^2$$

$$(X - x_j)^2 + (Y - y_j)^2 \geq R^2$$

$$X \geq R$$

$$Y \geq R$$

$$Y \leq 1 - R$$

$$X \leq 1 - R$$

