

```

circles :=
  ContourPlot[Evaluate[Flatten[Table[(x - n)^2 + (y - m)^2 ==  $\rho^2$ , {n, -3, 3}, {m, -3, 3}]]],
    {x, -3, 3}, {y, -3, 3}, Axes → True, AspectRatio → Automatic, ContourStyle → Black]

 $\rho$  := 0.3

points := {{0.4, 0.1}, {0.22924952910108745, 0.19350621025416642},
  {0.05283194463606211, 0.7046886632281584},
  {0.06177169928112605, 0.2935715537444358}, {0.768731955664866, 1.8089107756324223},
  {-1.7549257396828621, 1.1730277634658894}, {-1.278253524817416, 1.887861799877635},
  {-1.700617935559081, 1.9807547540651356}, {-1.299563417407707, 2.0161789663148117},
  {-1.7168158123204487, 2.0990288637129226}, {-1.1661377215190767, 2.7502035679028825}}

(* println(collisions([0.5,0.1],[-0.42,0.23],0.3,10)[1]) *)

Show[circles, ListPlot[points, Joined → True, PlotStyle → Directive[Thickness[0.005]]]]

```

