Answer on Question #45213 – Math - Geometry

Problem.

i have many objects with known centre of mass coordinates distributed on a plane.
the objects have 2 main shapes (cudic and cylindrical).

i previously calculated the distance between there centres of mass to detect if they intersect 2 by 2.

now all what i need is to know which object is visible to the others so i can calculate the view factor
related to each object with respect to only the visible onces.

I'm waiting your help. thank's

Solution.

There are many different cylinders (with different heights and different surfaces) with the same center of mass, so you need know the shapes of the cylinders.

Suppose that you chose some object and you need to calculate which objects are visible for it. You need to set the origin in it center mass. If it is cube, then coordinate axes should be parallel to sides of object. If it is cylinder, then the one coordinate axis should be parallel to the cylinder axis and one coordinate should be parallel to the cylinder bottom. Then you should find projection from both side on this axes to find which object are visible and which aren't.