

**Due:** Start of class on Friday May 21.

This problem is simple... or is it?

Just find all of the points,  $(x, y)$ , where the tangent plane of the surface

$$f(x, y) = xye^{-\frac{x^2+y^2}{2}}$$

is horizontal.

As always, present your solution and reasoning clearly. Use complete sentences and diagrams or graphs as needed.