

Sketch of simple proof for FLT proposed

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In cartesian coordinates, if the curve $\mathbf{C} : \mathbf{x}^n + \mathbf{y}^n = \mathbf{z}^n$, $\mathbf{n} > 2$, is satisfied for the integers $\{\mathbf{x}, \mathbf{y}, \mathbf{z}\}$ at one point \mathbf{p} , then $\mathbf{x}^2 + \mathbf{y}^2 = \mathbf{k}^2$ is also a valid equation since the triangle with integer coordinates $\{\{\mathbf{x}, 0\}, \mathbf{p}, \{0, \mathbf{y}\}\}$ is a pythagorean triangle. So \mathbf{p} belongs both to the circle $\mathbf{x}^2 + \mathbf{y}^2 = \mathbf{k}^2$ and to \mathbf{C} .

But this is impossible because as \mathbf{n} increases, \mathbf{C} is smaller and smaller and *contained* in the circle, and so has no common point with it.

The latter contradiction proves the impossibility of the condition $\{\mathbf{x}, \mathbf{y}, \mathbf{z}\}$ integers to satisfy $\mathbf{x}^n + \mathbf{y}^n = \mathbf{z}^n$ when $n > 2$.

January 22, 2018
BERNAY
France