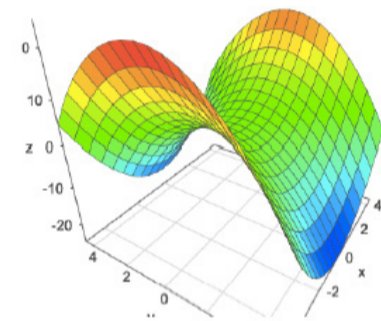




Many students find that I am able to explain mathematical concepts in a clear and concise manner. For certain topics, I strive to show my students the connection between abstract mathematical notions and real-life applications. I am not advocating that every topic should be integrated with the real world, but an appropriate approach often makes mathematics meaningful. I have found that nothing is more motivational to students than the instructor having a genuine interest in what they are learning. As part of my effort in integrating technology into classroom instruction and learning, I have created interactive websites for visualizing 3D curves and surfaces. One of the nice features of these websites is that the graphics can be rotated or zoomed in and out for viewing from different perspectives.

Ku Cheng Yeaw

Dept of Mathematics
Faculty of Science

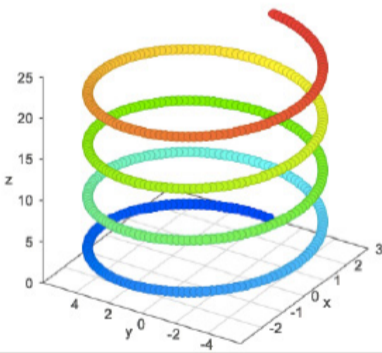
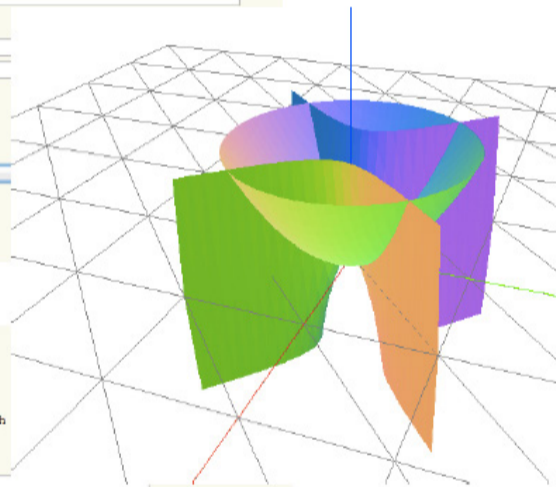


Click [here](#) to see how to enter Math expressions in javascript.

$f(x,y) = x^2 - y^2$

Domain:
 $\leq x \leq$
 $\leq y \leq$

Choose example function $f(x,y)$:



Click [here](#) to see how to enter Math

$r(t) = \langle x(t), y(t), z(t) \rangle$

$x(t) = 3 * \text{Math.cos}(t)$

$y(t) = 6 * \text{Math.sin}(t)$

$z(t) = t$

Domain:
 $\leq t \leq$

Keep Aspect Ratio : (set it to 'true' if you want the x- and y-axis to have the same ratio.)

Web links:

- <http://matkcy.github.io/MA1104-3dcurve.html>
- <http://matkcy.github.io/MA1104-3dgrapher.html>
- <http://matkcy.github.io/MA1104-implicitplot.html>
- <http://matkcy.github.io/MA1104-intersection.html>

What Students Say...

"I love how he shows us the applications of multivariable calculus in different fields (Eg. physics), and the interactive websites which he designed is awesome! Helps me to visualise the 3D shapes clearly. I'm full of gratitude that he goes the extra mile to teach us stuff related to the module. The particle application he showed during lectures is mesmerizing! Please get him to continue teaching this module, as I believe future generations will appreciate his efforts, just as I did."