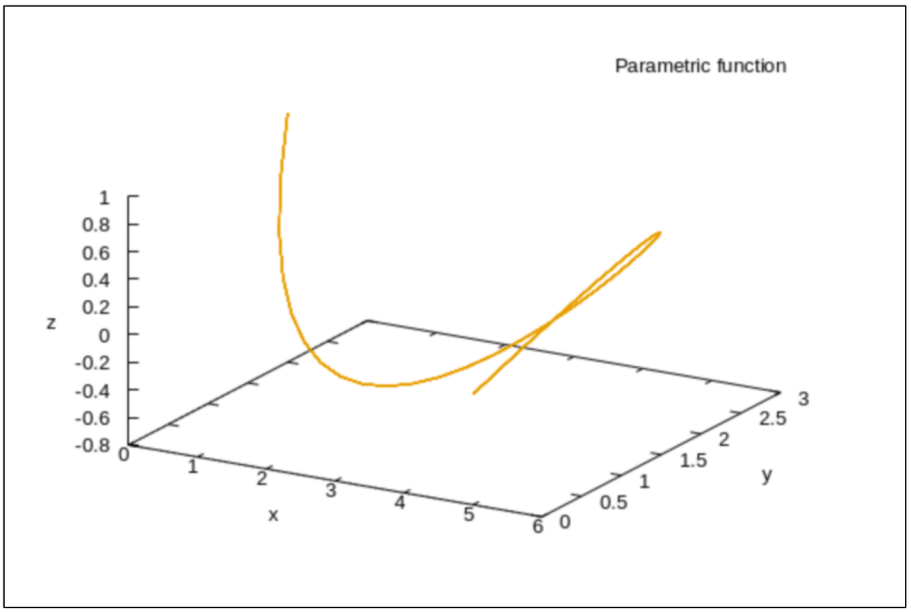
https://github.com/t-o-k/Maxima-bezier/bezier_curve_3d.wxmx


```
(%i1) kill(all)$

(%i1) load("draw")$

(%i2) load("bezier")$

(%i3) points_x: matrix([  0,  2,  6,  5 ])$

(%i4) points_y: matrix([  2, -1,  6,  0 ])$

(%i5) points_z: matrix([  1, -3,  2,  0 ])$

(%i6) define(curve_x(s), bezier_function_1a(points_x, s))$

(%i7) define(curve_y(s), bezier_function_1a(points_y, s))$

(%i8) define(curve_z(s), bezier_function_1a(points_z, s))$

(%i9) expand(curve_x(s));
(%o9) -7*s^3+6*s^2+6*s

(%i10) expand(curve_y(s));
(%o10) -23*s^3+30*s^2-9*s+2

(%i11) expand(curve_z(s));
(%o11) -16*s^3+27*s^2-12*s+1
```

```
(%i12) wxplot3d(
         [
            curve_x(s),
            curve_y(s),
            curve_z(s)
         ],
         [ s, 0, 1 ],
         [ t, 0, 1 ]
       );
```

(%t12)



(%o12)