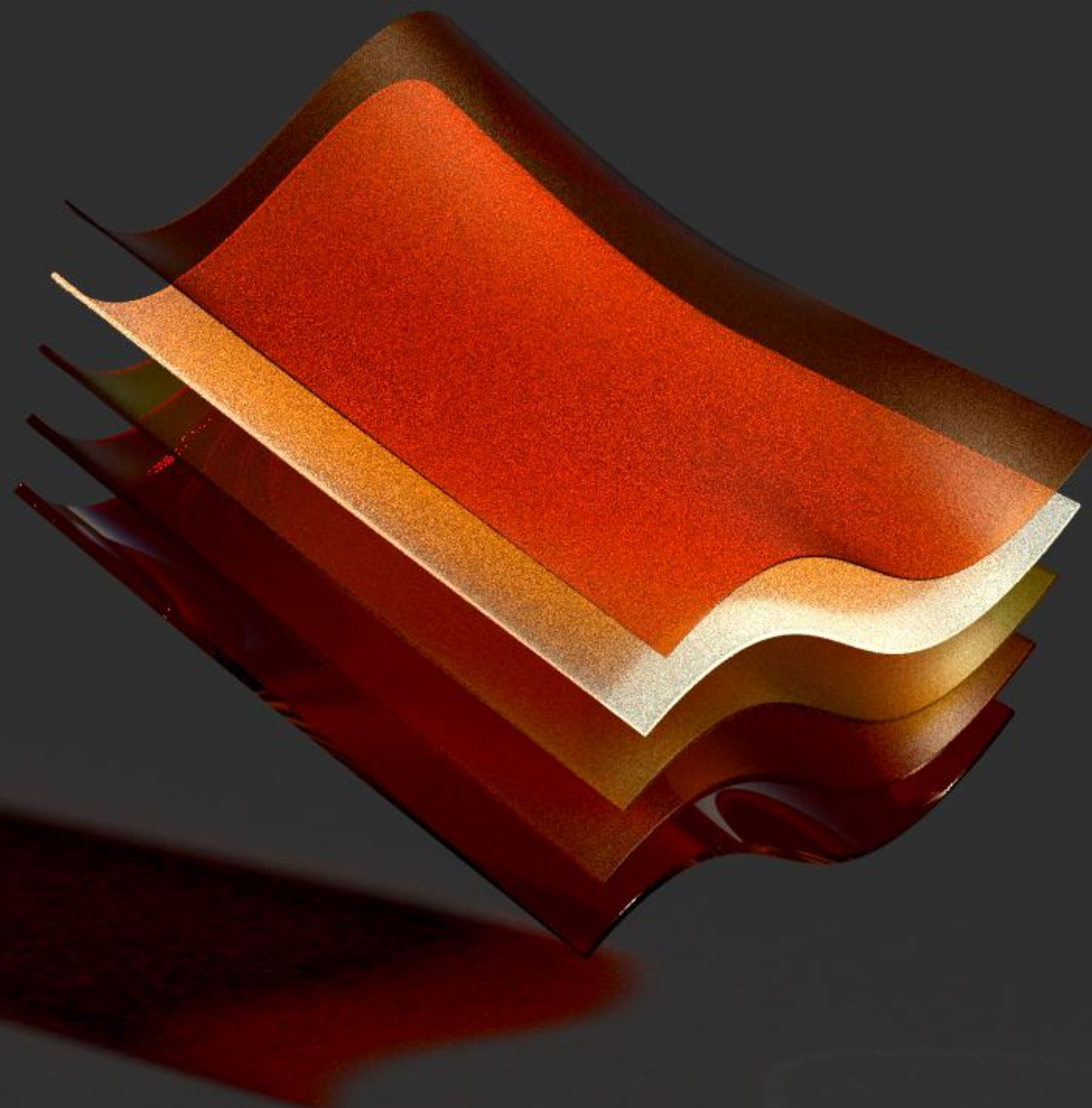




Fusion 360

Basic Surface Modeling

基础曲面建模-认识曲线





曲线 (spline)



曲面 (surface)

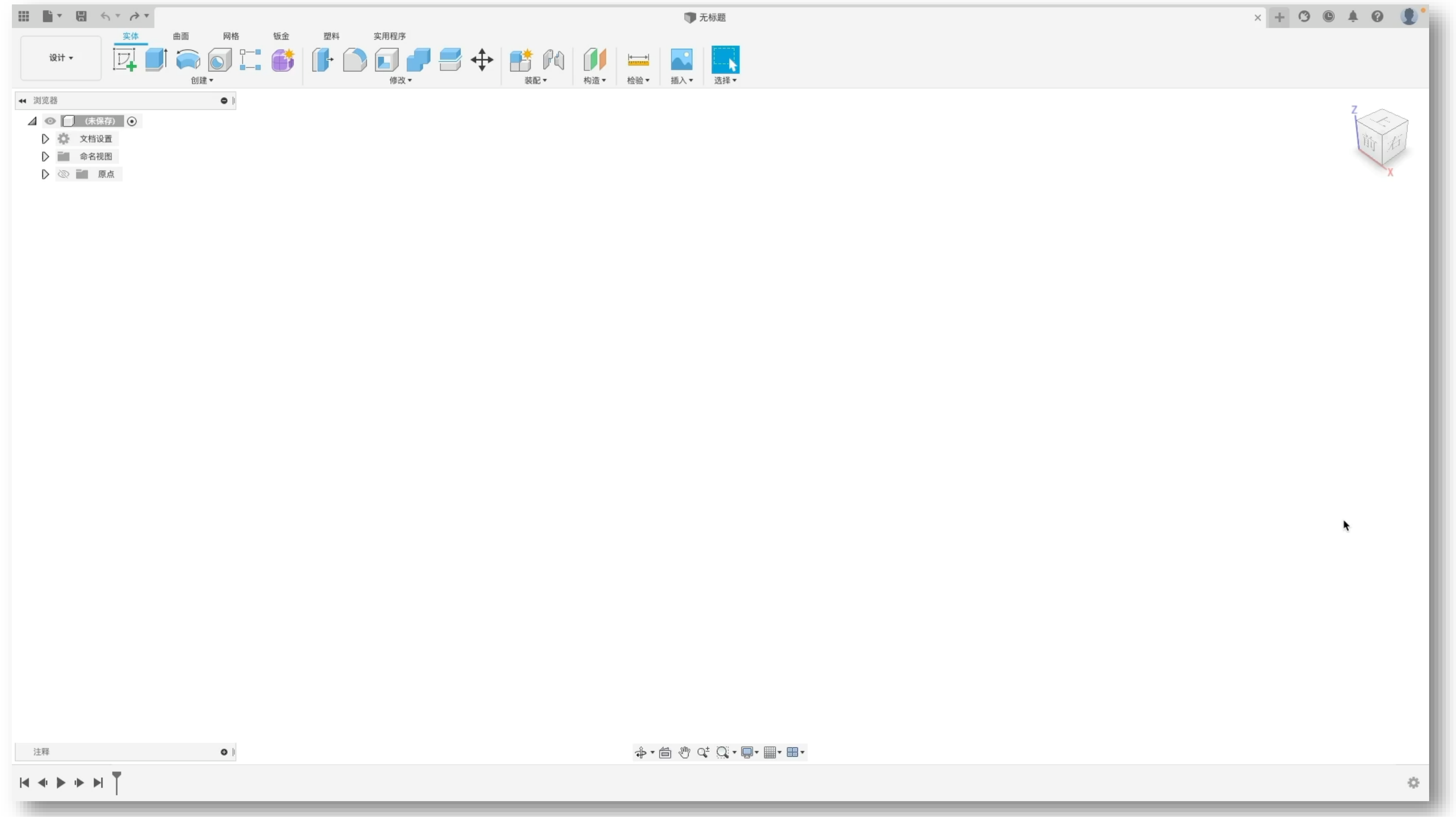


曲面建模
(surface modeling)

曲线 (spline)



Fusion 360 中的曲线

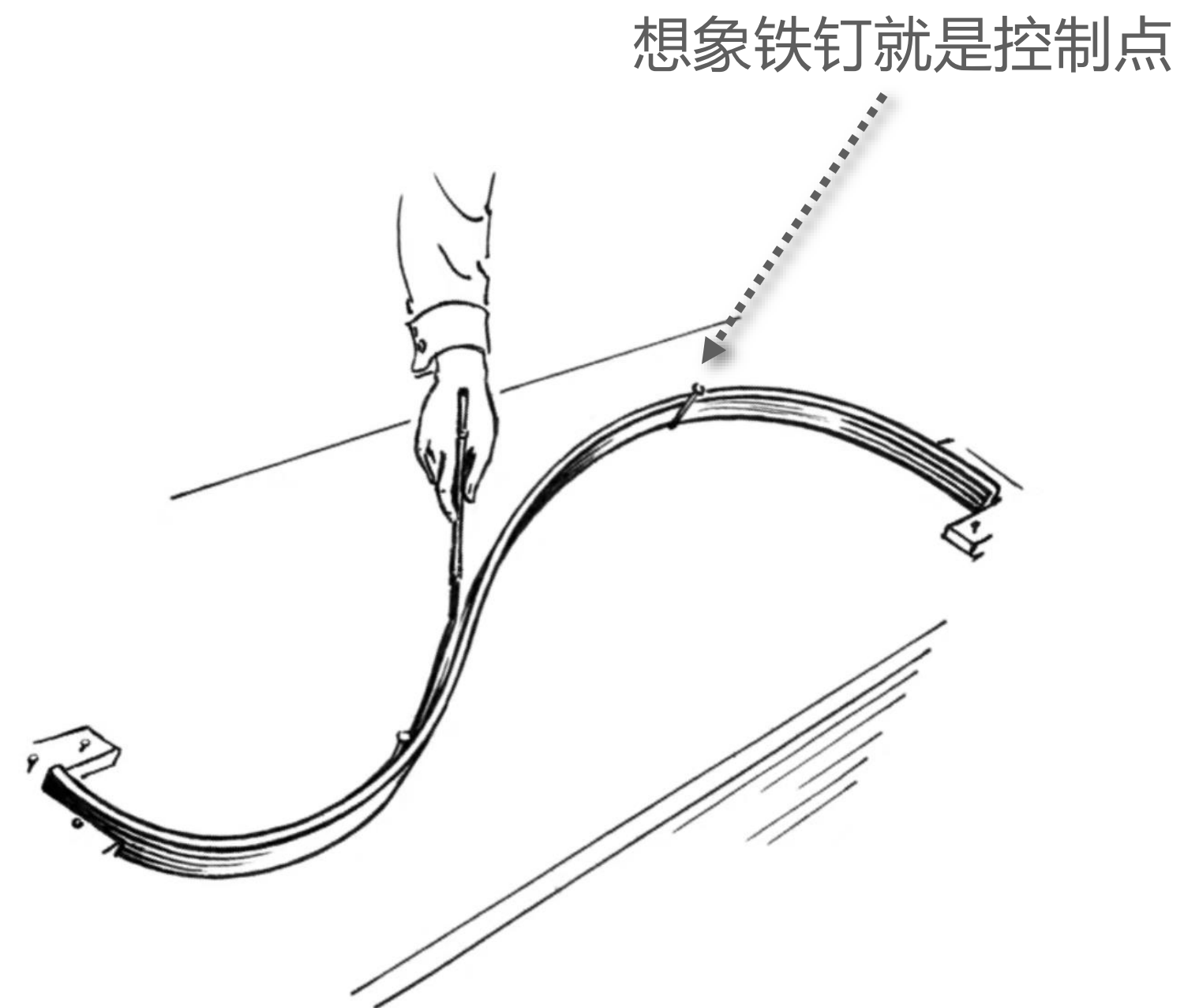


曲线 (spline)



拟合点曲线 Fit Point Spline

透过曲线上的点直接控制曲线

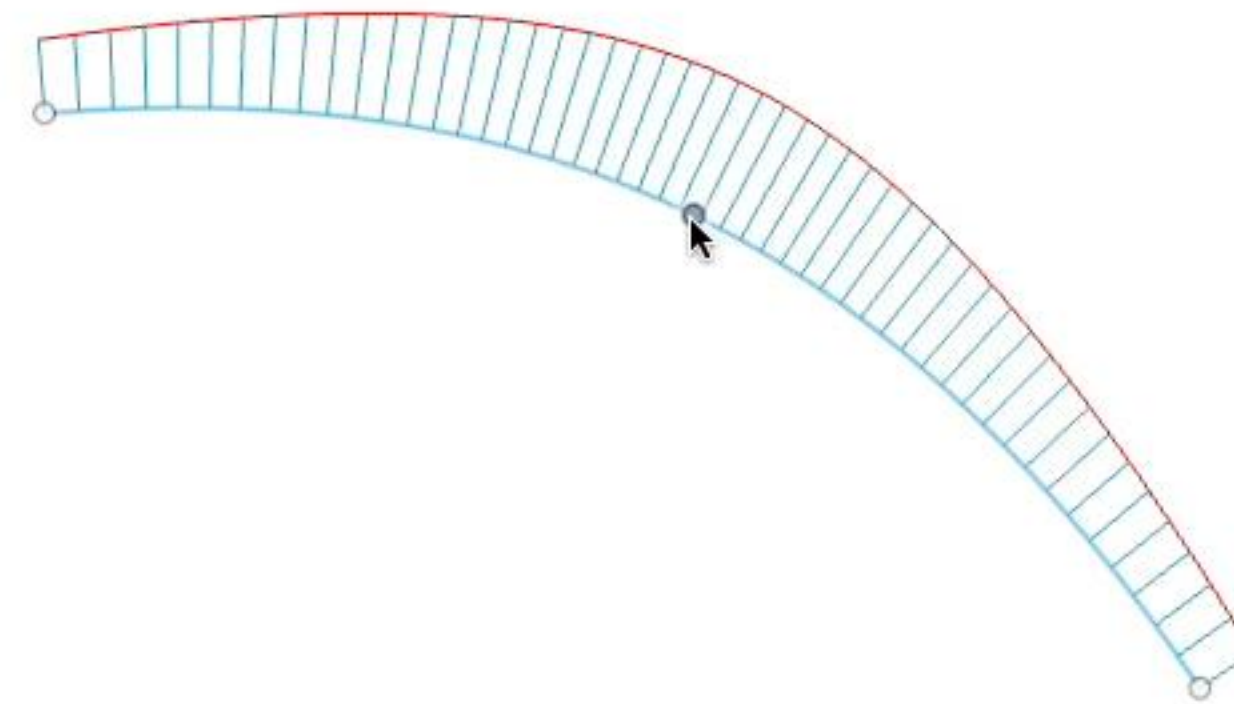


曲线 (spline)



拟合点曲线 Fit Point Spline

透过按下右键可以新增控制点

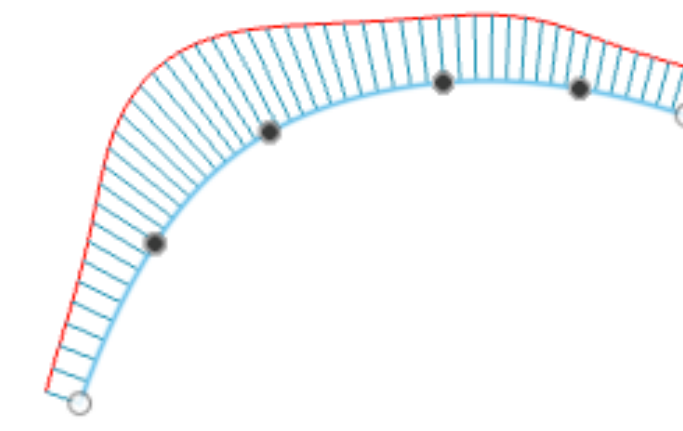


曲线 (spline)

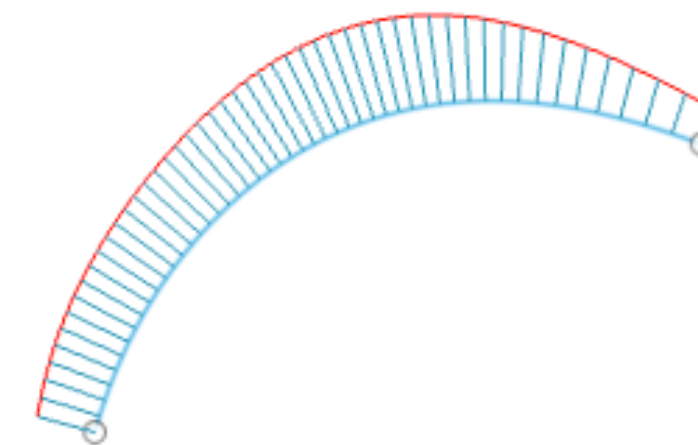
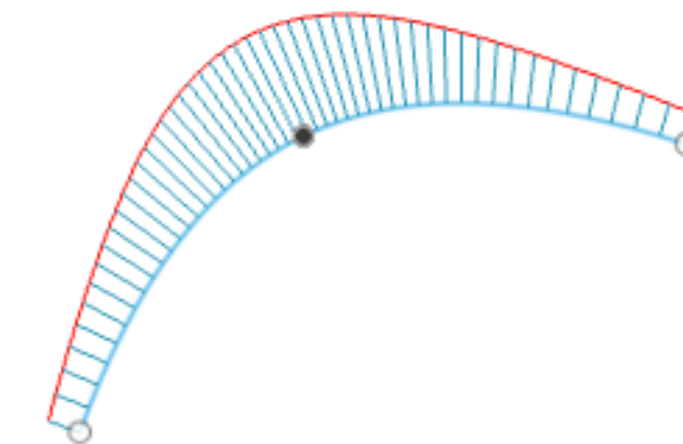


拟合点曲线 Fit Point Spline

尽可能的减少控制点



可以透过曲率梳来判断曲线的滑顺程度



曲线 (spline)



拟合点曲线 Fit Point Spline

让我们来练习看看：)

曲线 (spline)



小米静音鼠标练习

档案下载



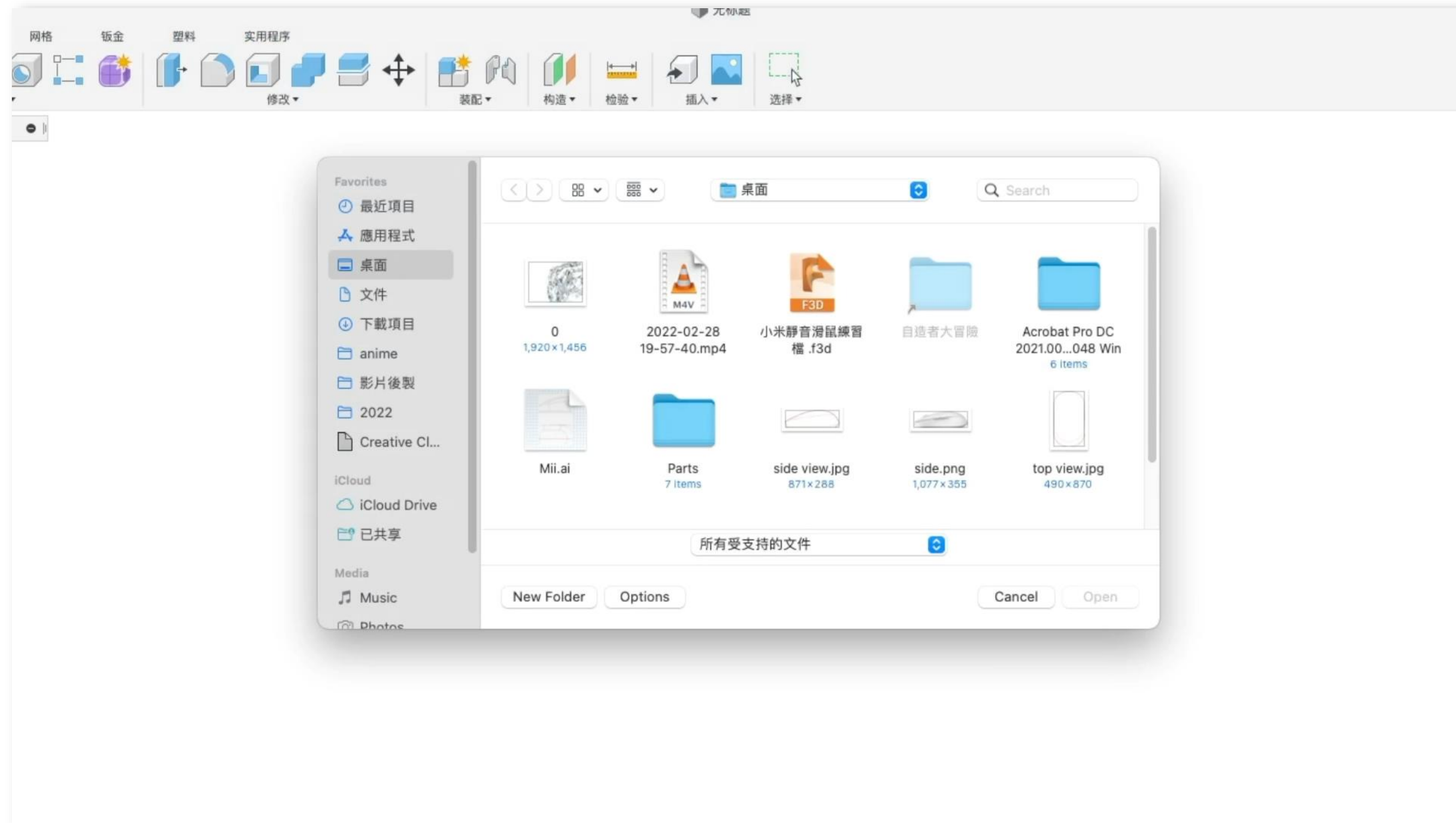
曲线介绍

 AUTODESK

曲线 (spline)



开启档案



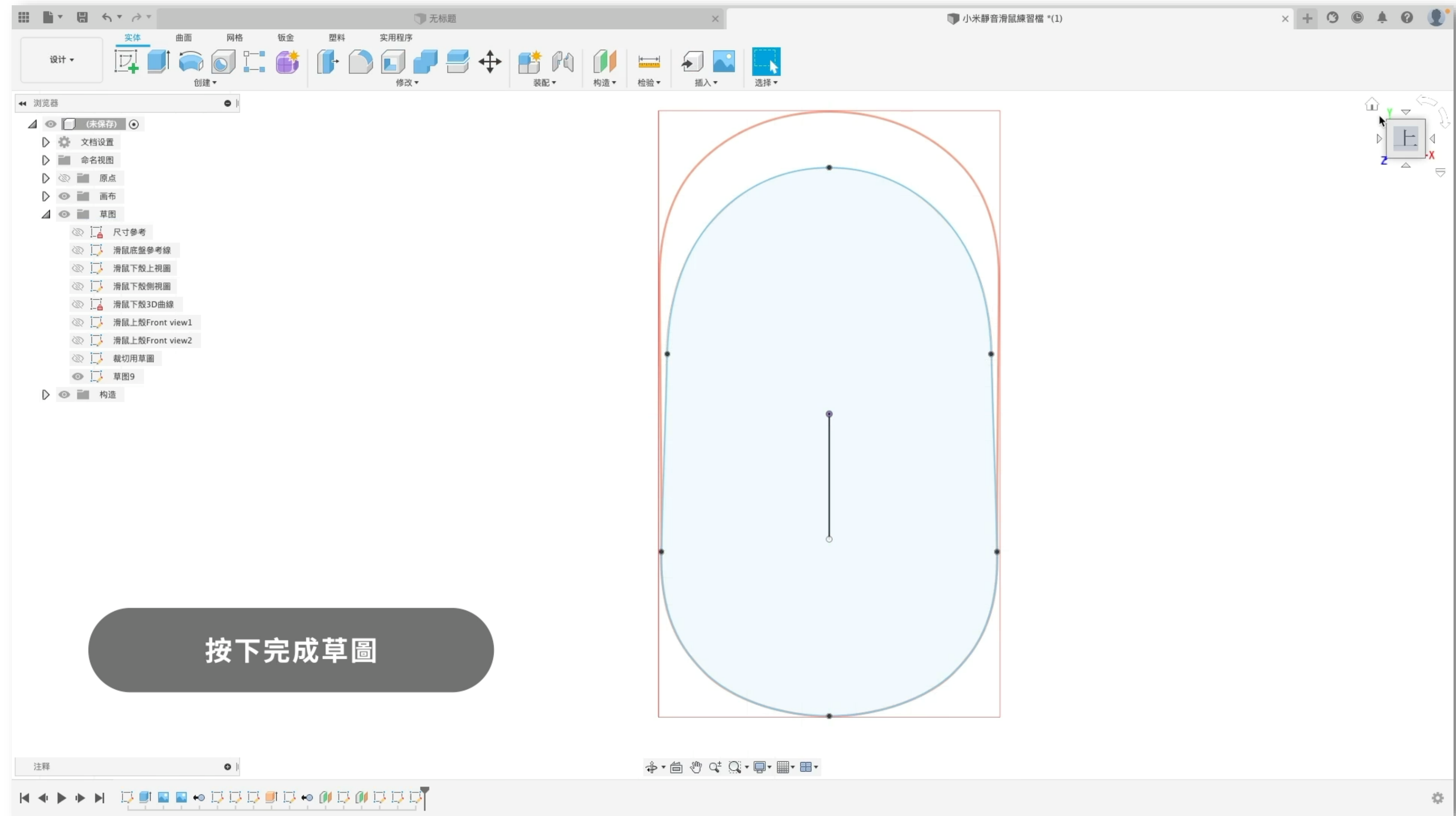
曲线介绍

AUTODESK

曲线 (spline)



绘制上壳的上视图曲线



按下完成草圖

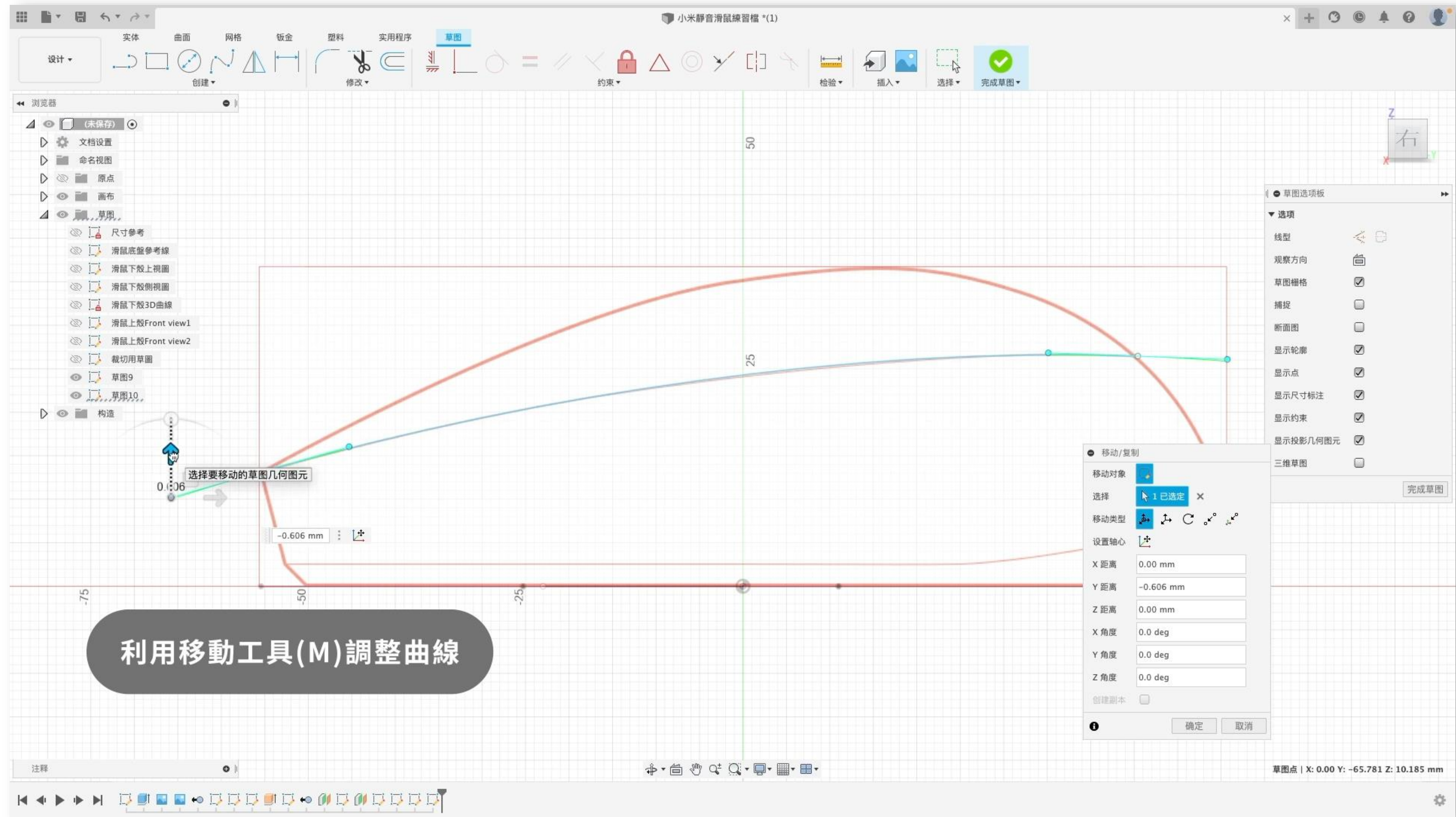
曲线介绍

 AUTODESK

曲线 (spline)



绘制上壳的侧视图曲线

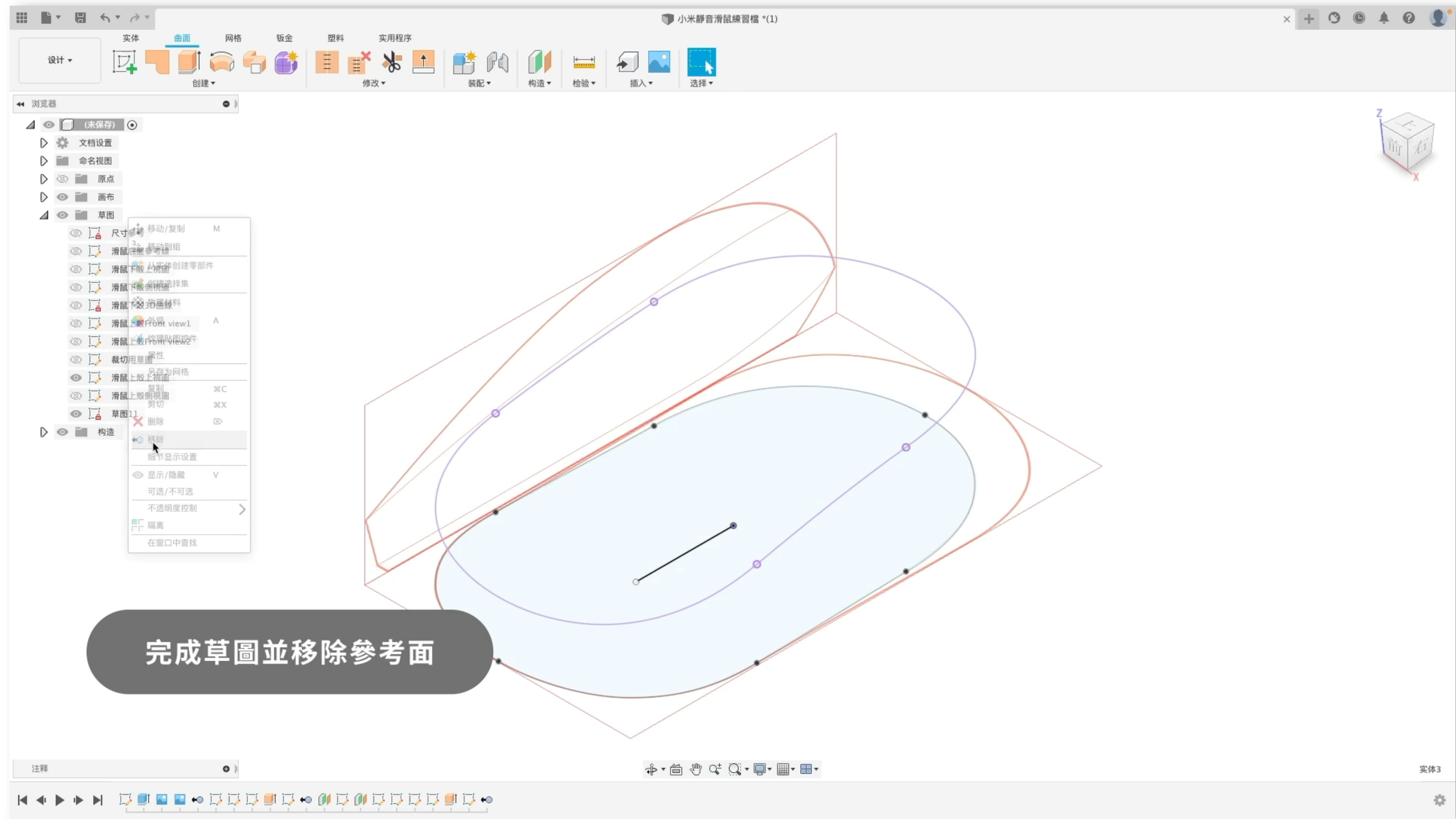


利用移动工具(M)调整曲线

曲线 (spline)

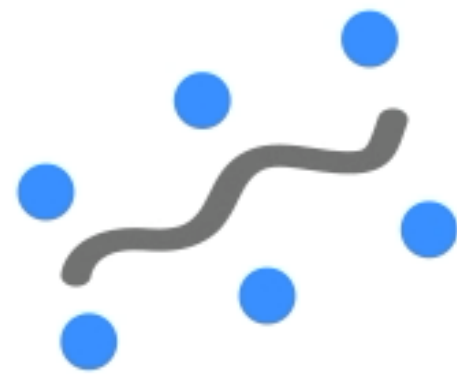


制作 3D 曲线



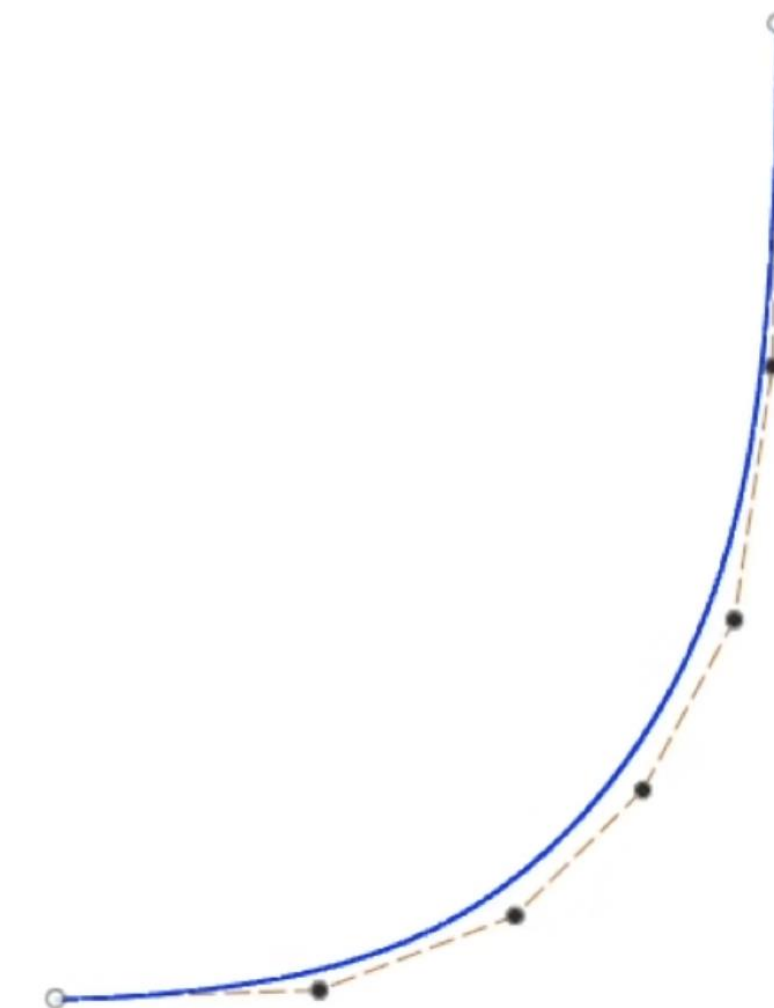
完成草圖並移除參考面

曲线 (spline)

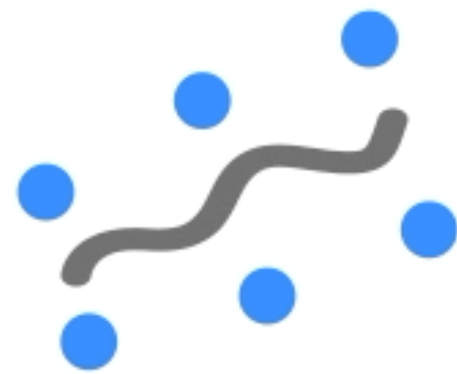


控制点曲线 Control Point Spline

利用控制点来拉出曲线的形状

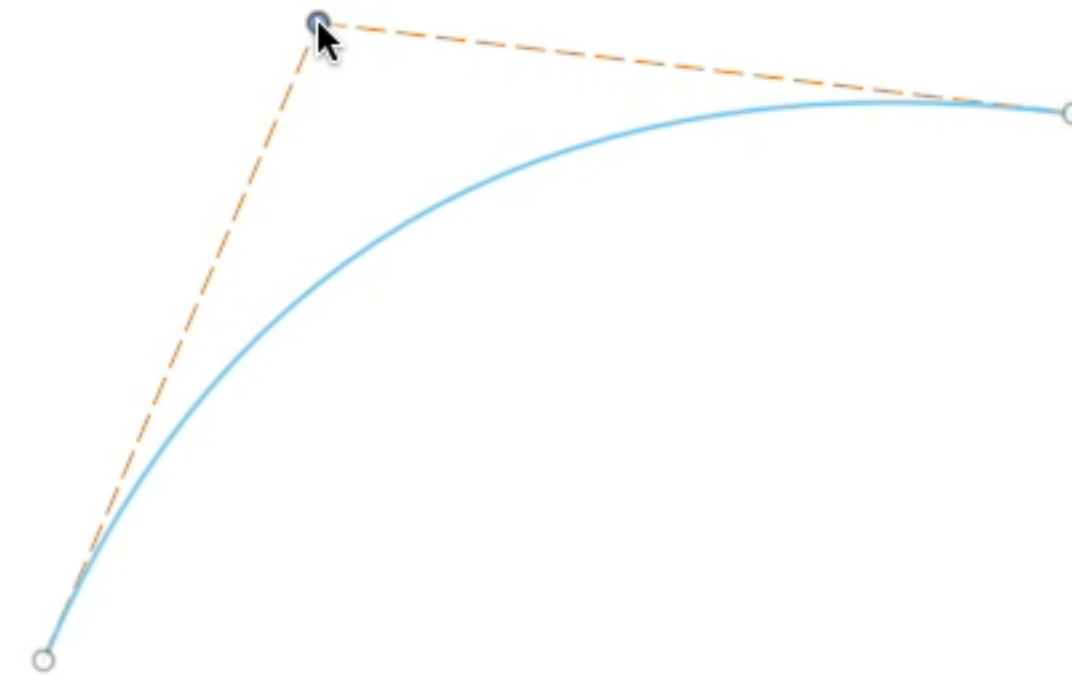


曲线 (spline)

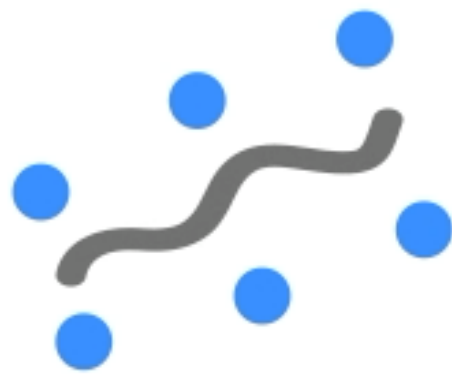


控制点曲线 Control Point Spline

一样按下鼠标右键可以新增控制点

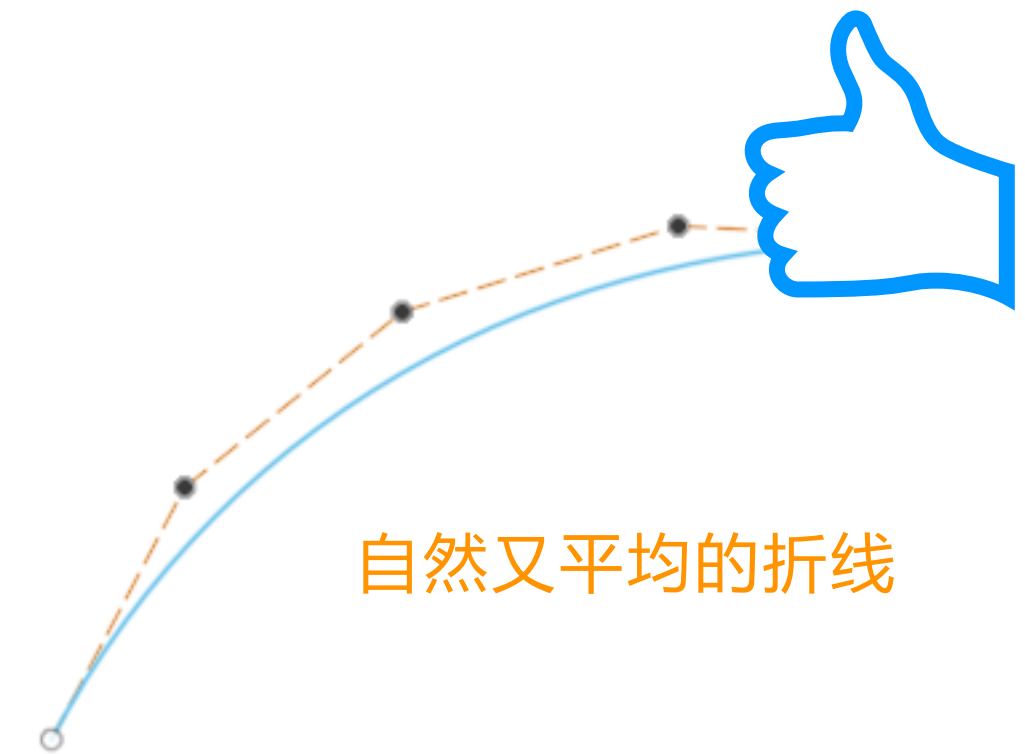
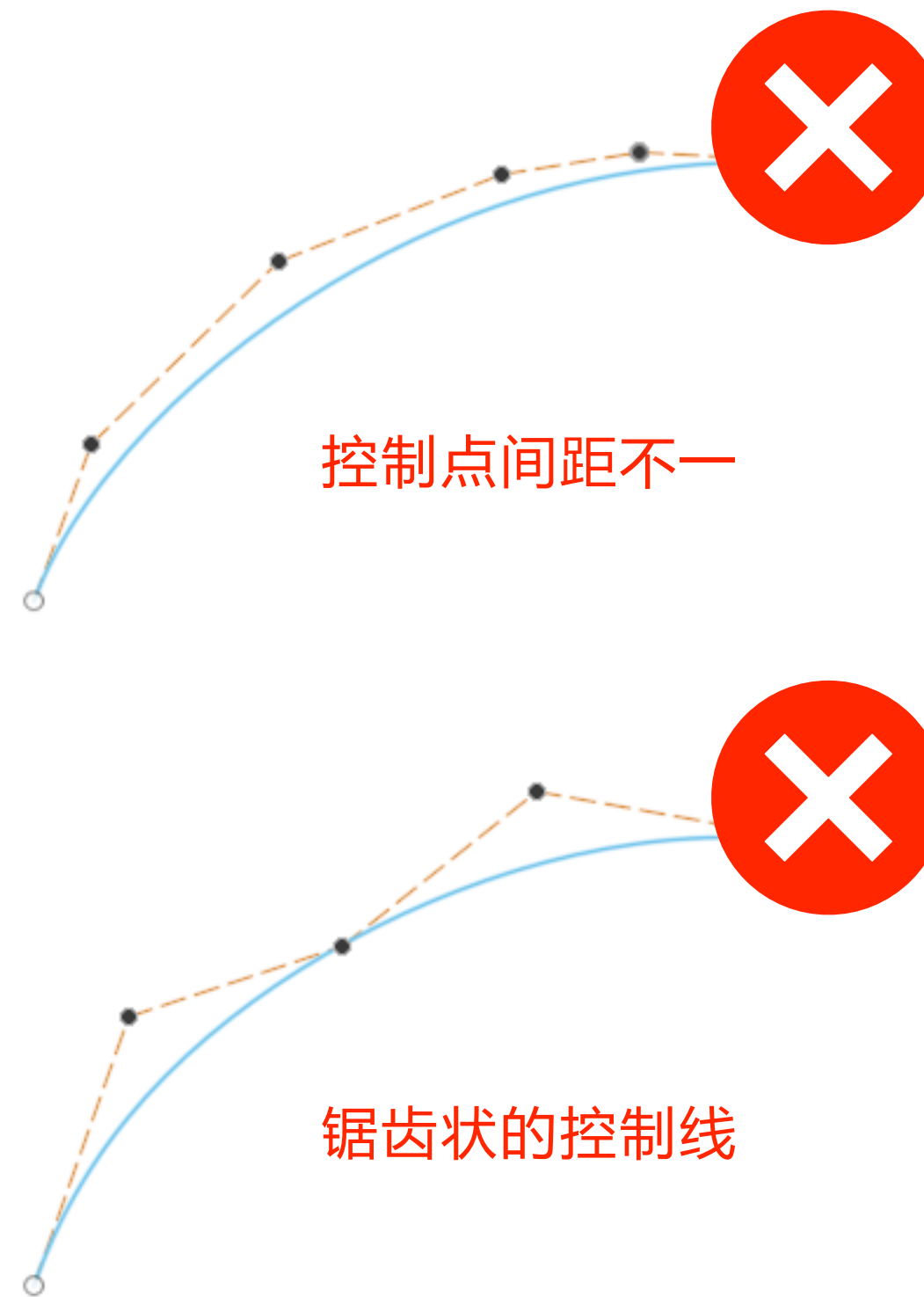


曲线 (spline)

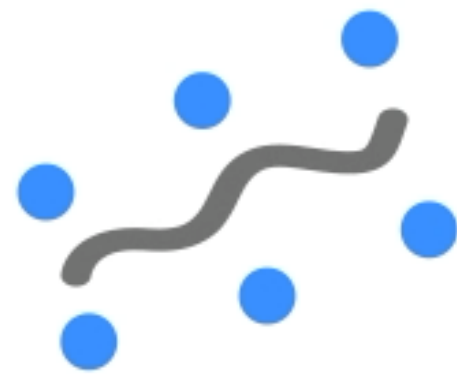


控制点曲线 Control Point Spline

控制点的优点是增加点不会让曲线不滑顺，
但要注意控制点的间距与折线的形状

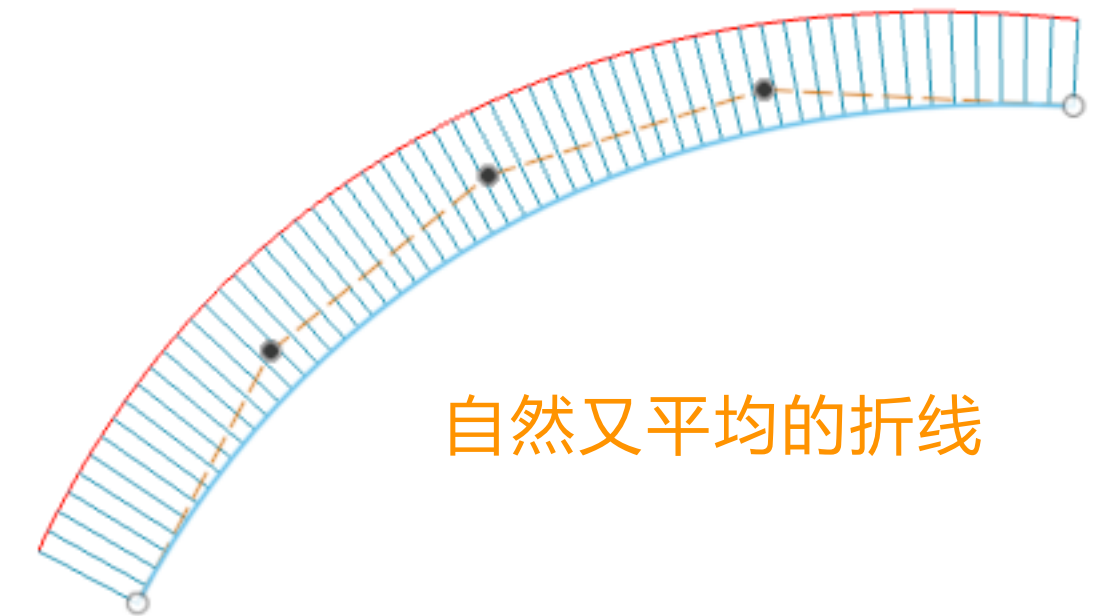
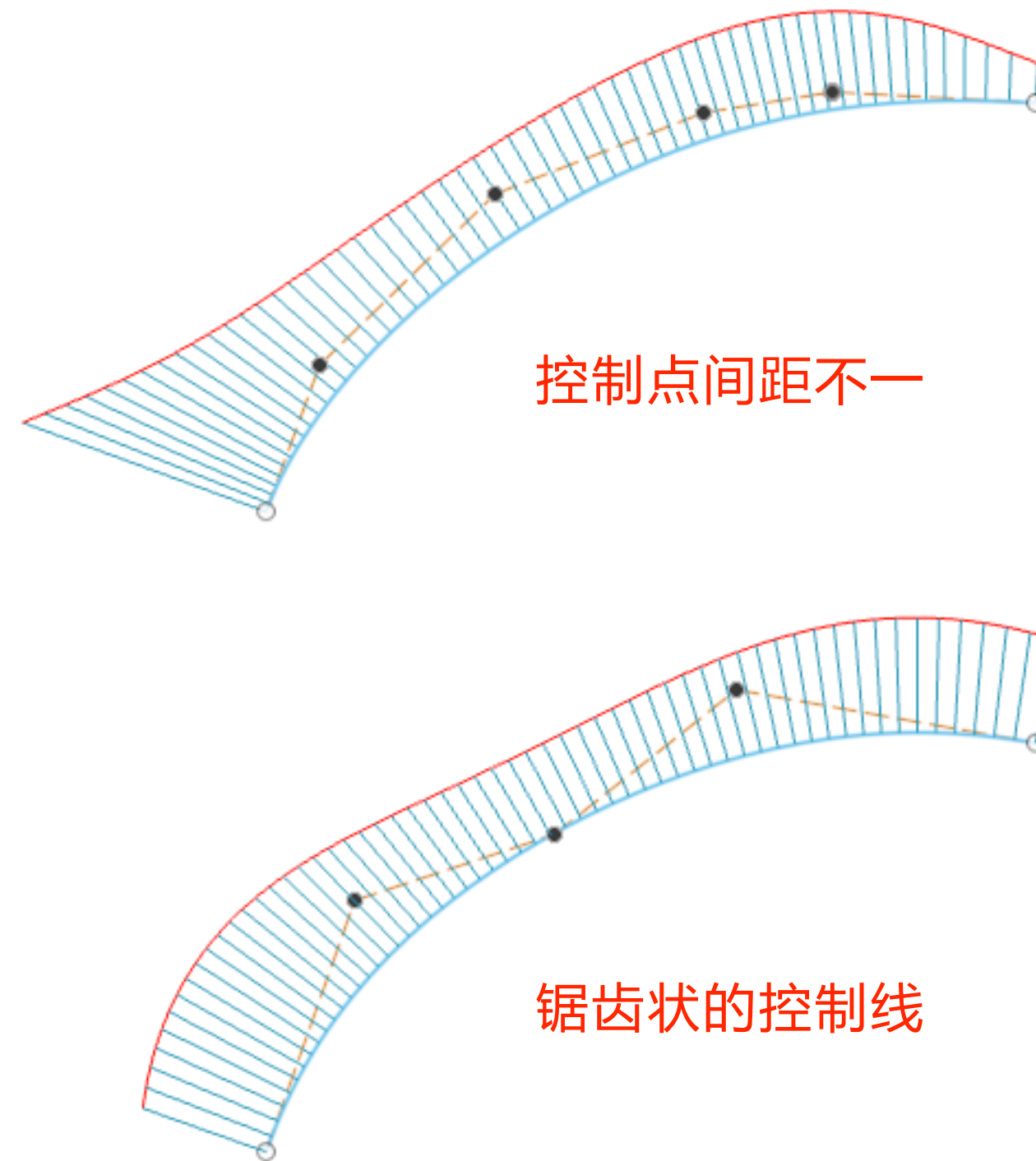


曲线 (spline)

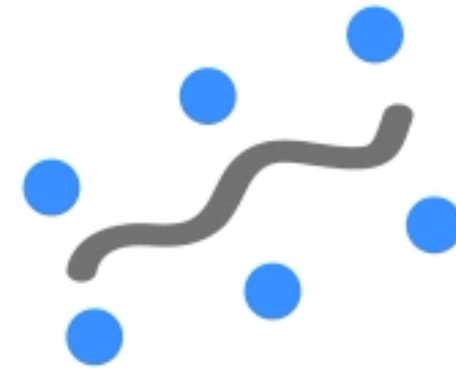


控制点曲线 Control Point Spline

控制点的优点是增加点不会让曲线不滑顺，
但要注意控制点的间距与折线的形状



曲线 (spline)



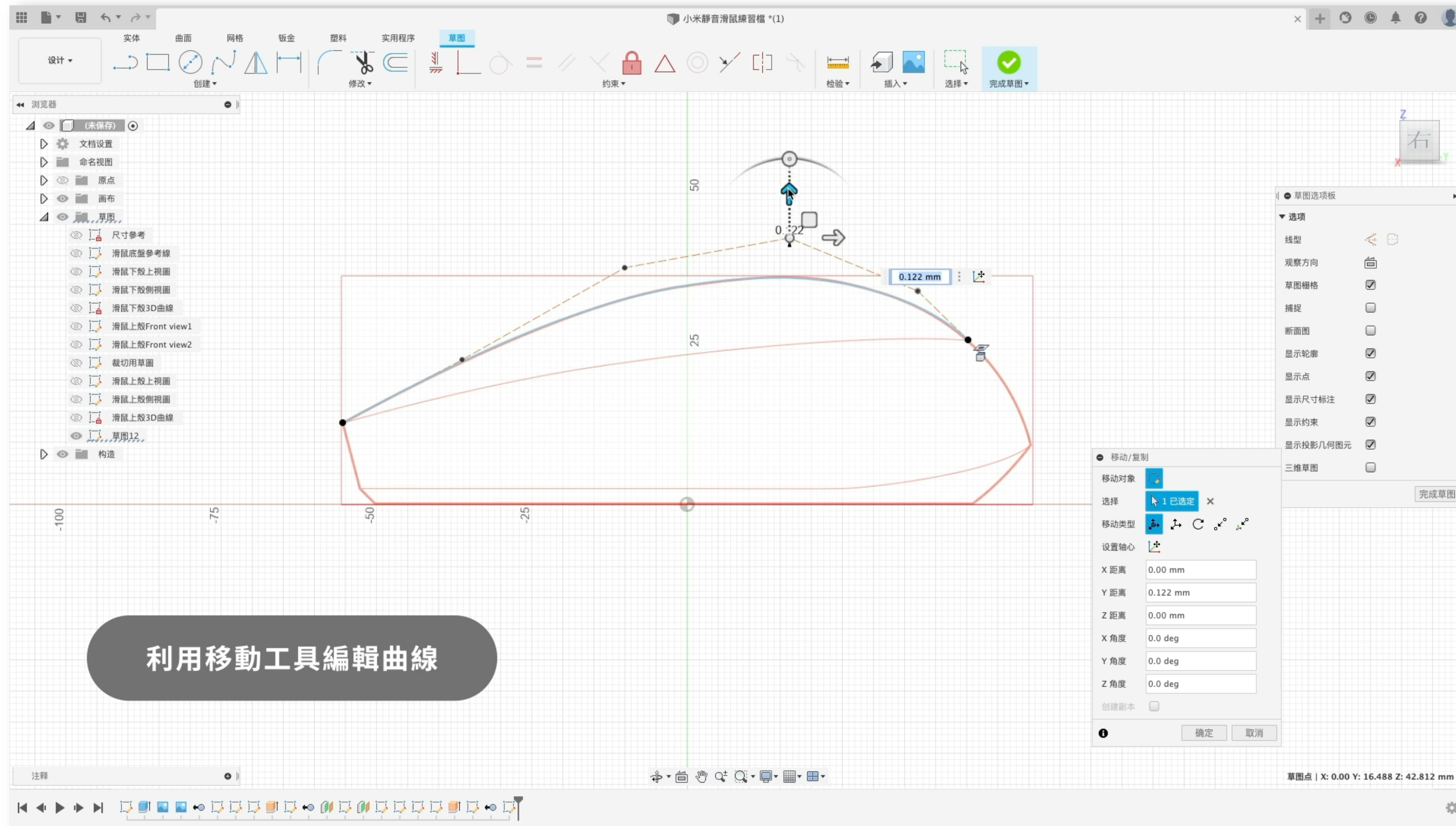
控制点曲线 Control Point Spline

让我们来练习看看：)

曲线 (spline)

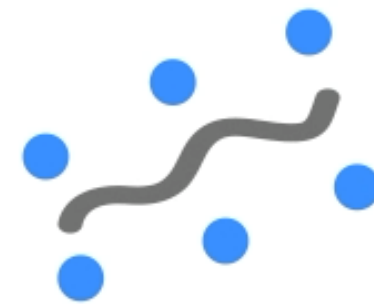


绘制鼠标的背脊线



利用移動工具編輯曲線

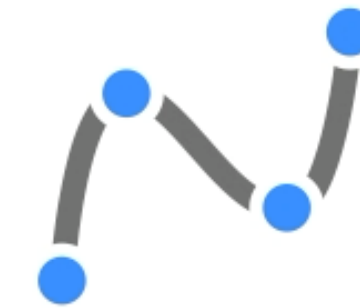
曲线 (spline)



控制点曲线 Control Point Spline

曲率较为滑顺

注意控制点的摆放要平均

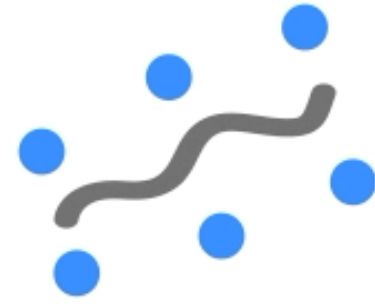


拟合点曲线 Fit Point Spline

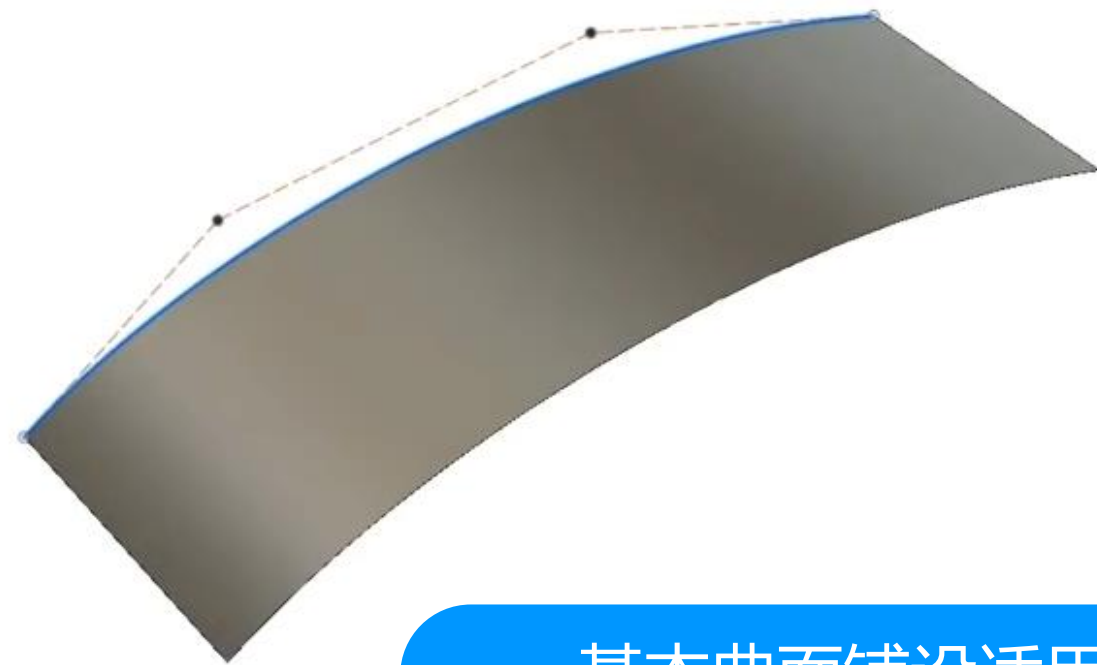
操作直觉性高

绘制时点不适合太多

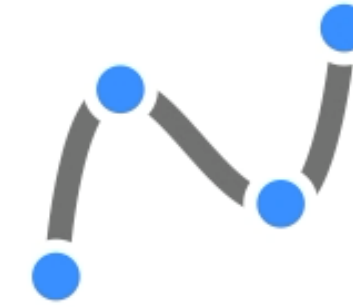
曲线 (spline)



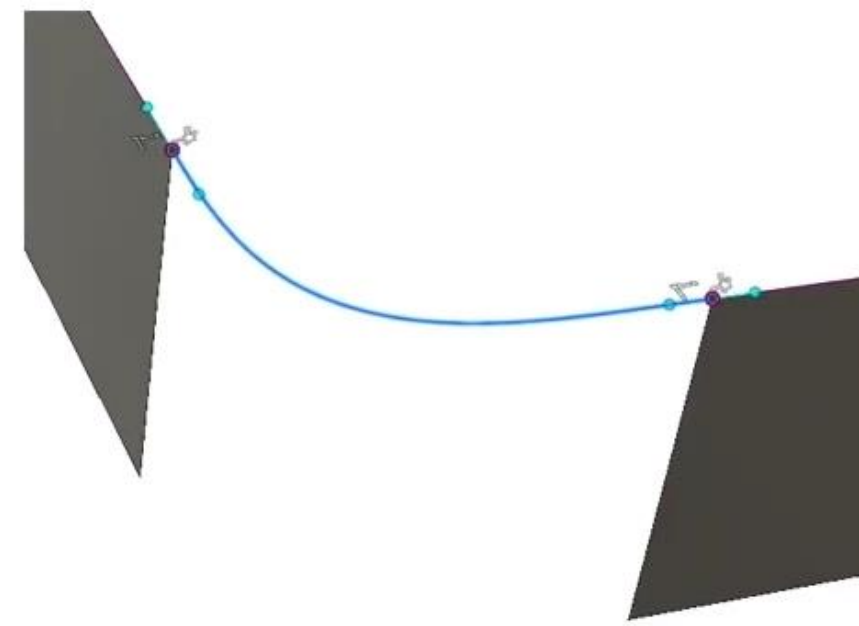
控制点曲线 Control Point Spline



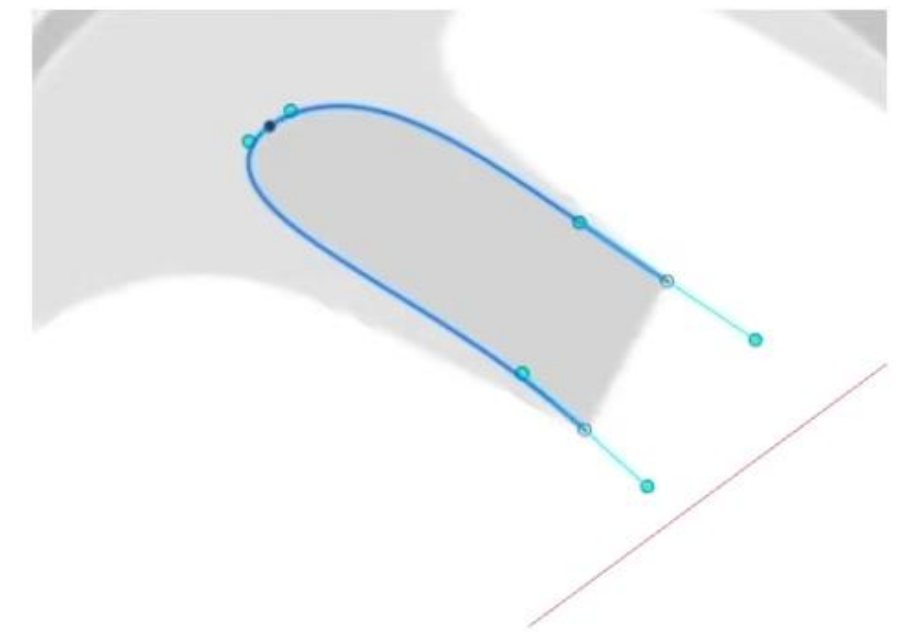
基本曲面铺设适用



拟合点曲线 Fit Point Spline



连接面时的参考面



描绘细节较多

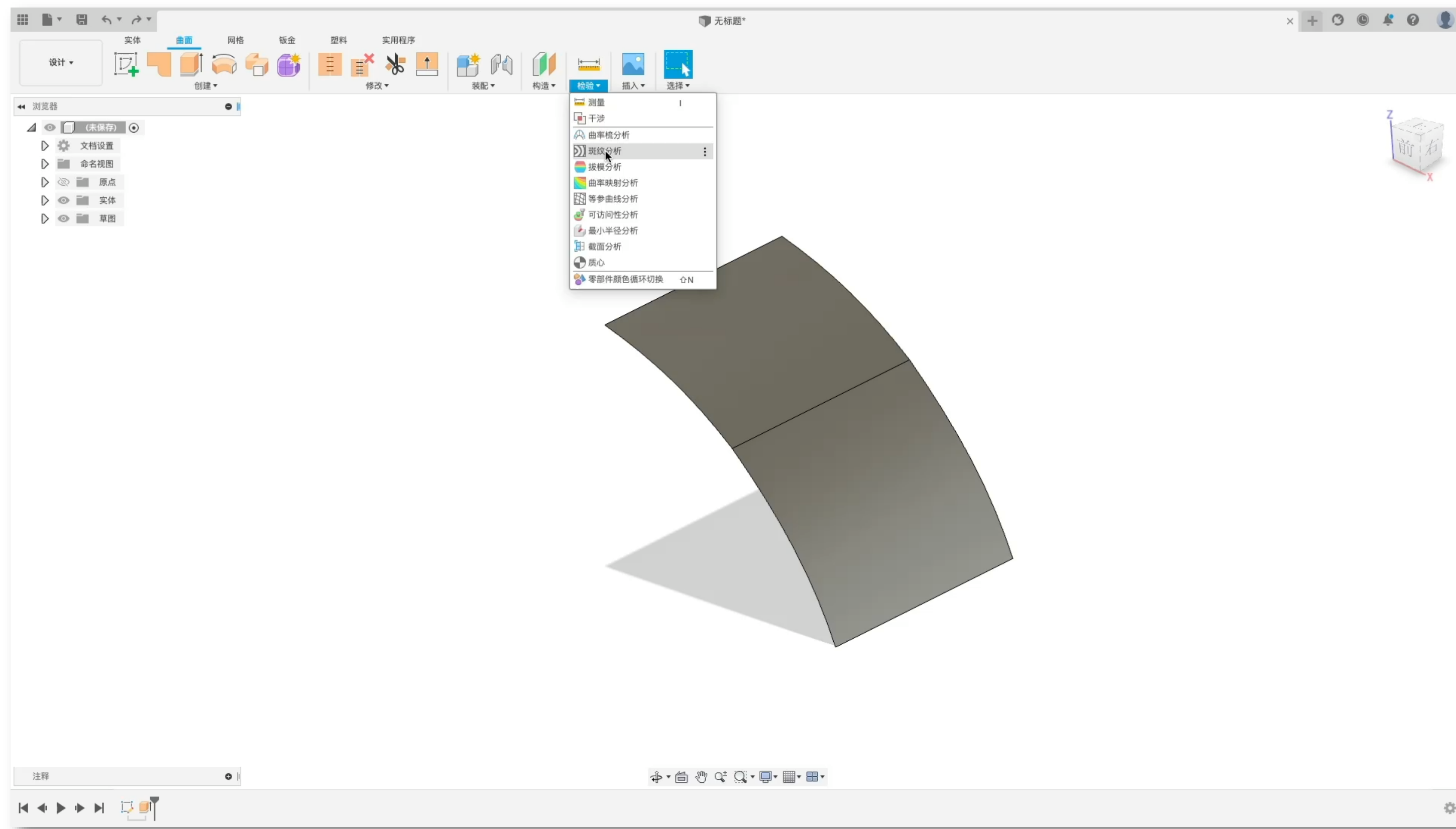
曲线 (spline)



曲线连接 Connecting Splines

判断曲线滑顺使用 曲率梳

判断曲面顺接与否使用 斑纹分析



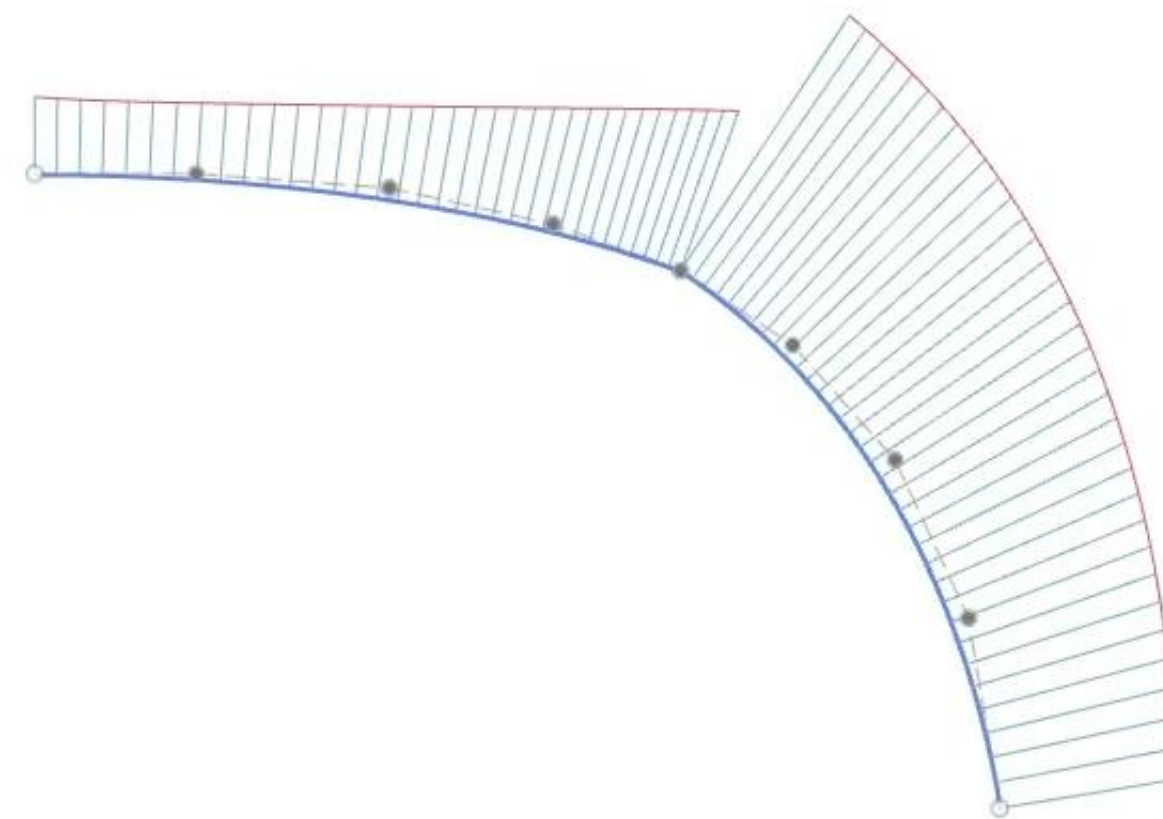
曲线 (spline)



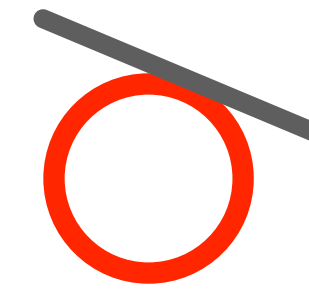
曲线连接 Connecting Splines

只是将线 / 面连接在一起，会有锐利的连接边

G0 相连



曲线 (spline)

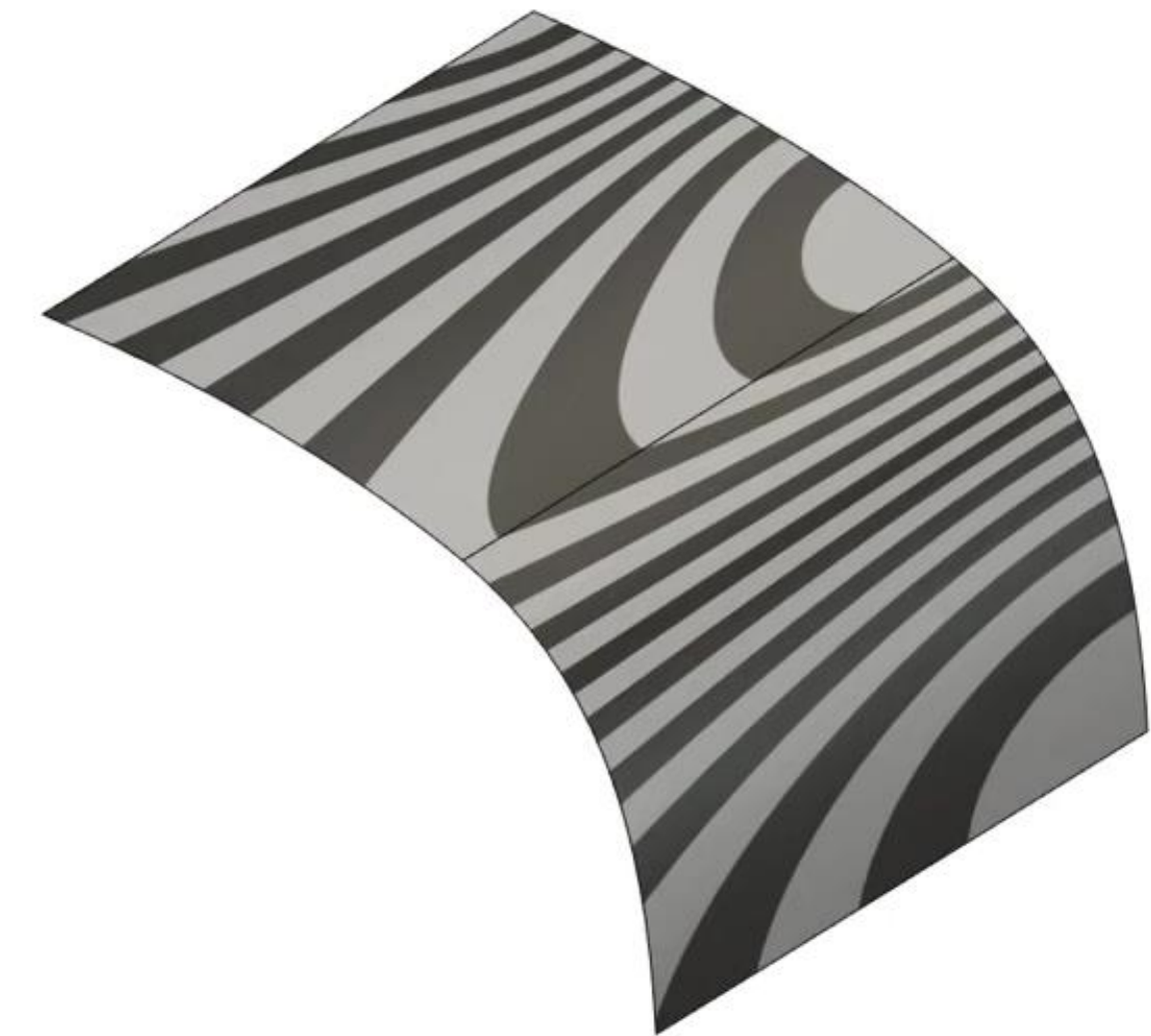
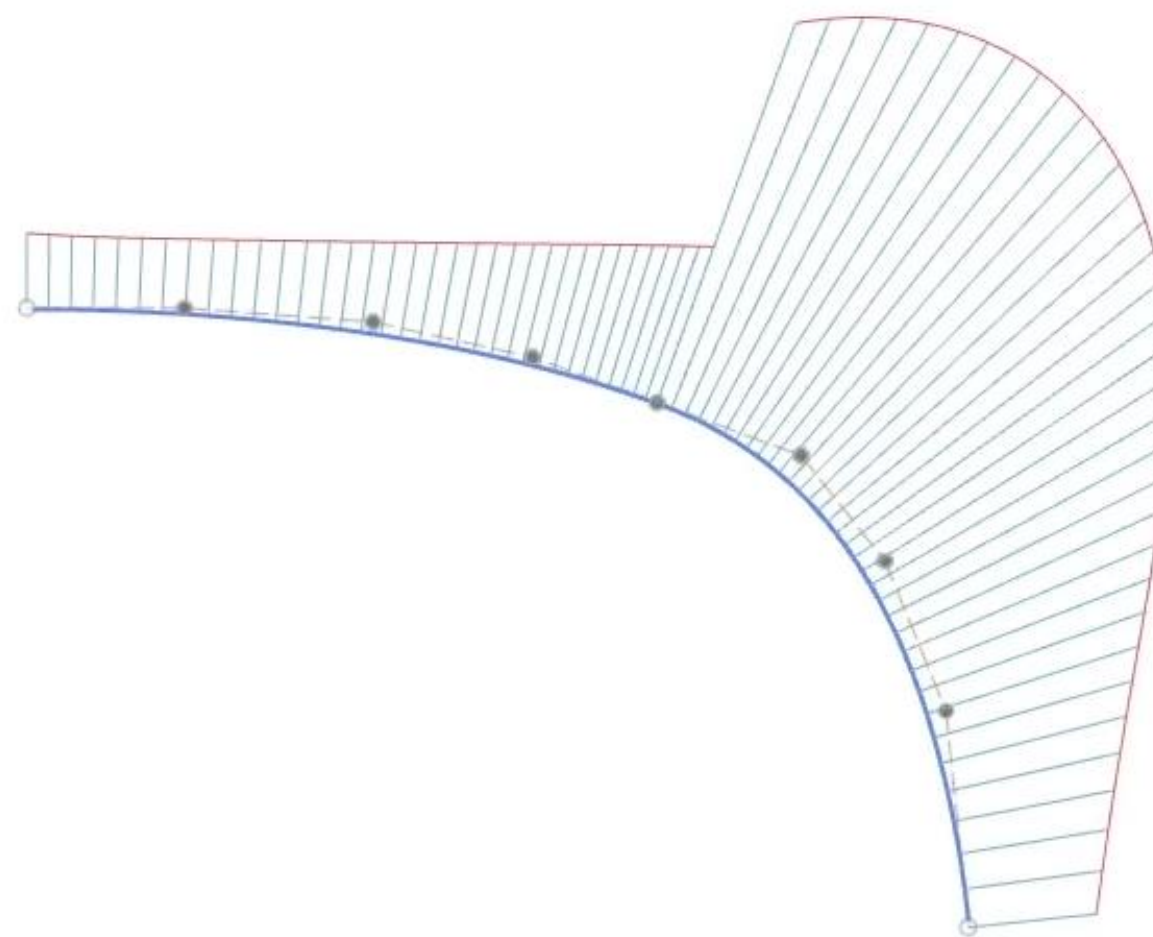


G1 相切

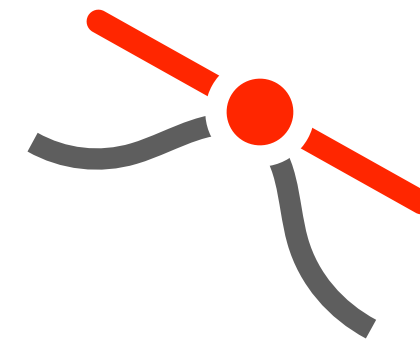


曲线连接 Connecting Splines

将线 / 面用相切的方式连接，
依然会有锐利的连接边



曲线 (spline)

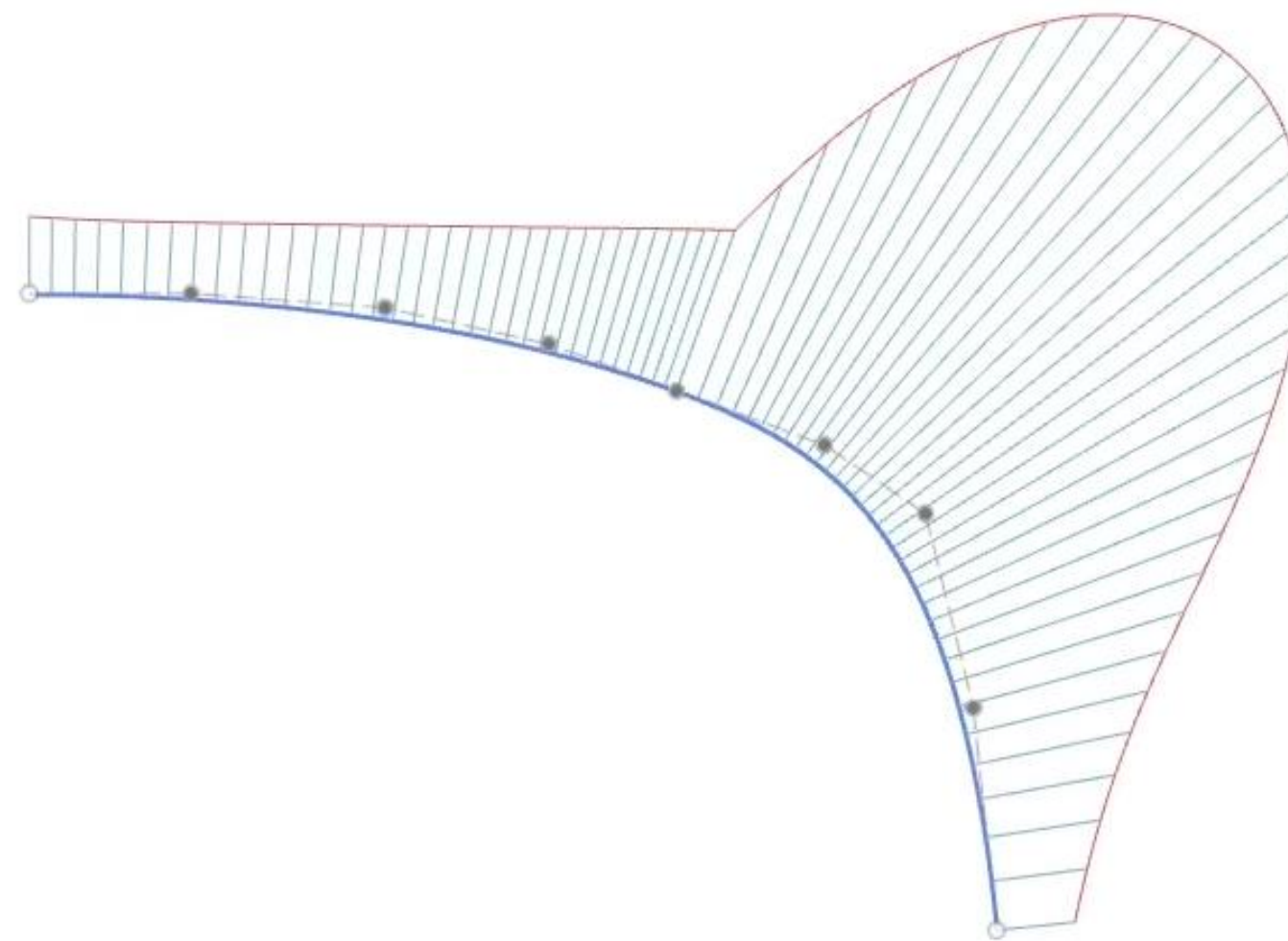


G2 曲率

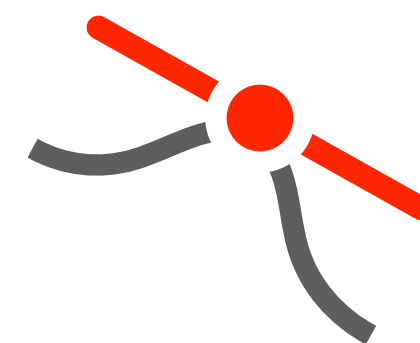


曲线连接 Connecting Splines

将线 / 面用曲率相同的方式连接，
曲面看起来滑顺



曲线 (spline)



G3



曲线连接 Connecting Splines

将线 / 面用不仅曲率相同并且整体曲率梳滑顺，
曲面看起来像是一体构成

Fusion 360 建构曲面无法选择G3选项，
仅能透过调整草图曲线来操作。

不仅仅是曲率相同，连曲线都滑顺

