Curve

In [1]:

```
import numpy as np
import matplotlib.pyplot as plt
```

In [2]:

```
x2 = np.linspace(-2,2,50)
y2 = np.linspace(-2,2,50)
z2 = np.linspace(-2,2,50)
type(x2)
```

Out[2]:

numpy.ndarray

In [3]:

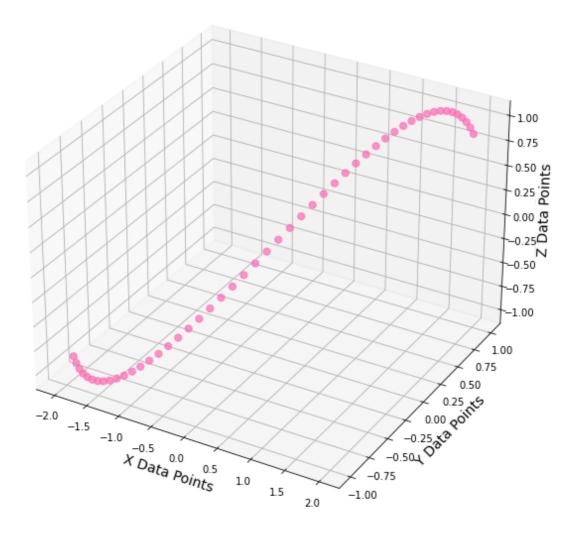
```
# Plotting 3D Points
plt.figure(figsize=[15,10])

ax = plt.axes(projection="3d")
ax.set_title("3D Points", fontsize=16)
ax.set_xlabel("X Data Points", fontsize=14)
ax.set_ylabel("Y Data Points", fontsize=14)
ax.set_zlabel("Z Data Points", fontsize=14)

ax.scatter3D(x2,np.sin(y2),np.sin(z2), color="hotpink", s=50, alpha=0.7)
print(type(plt))
plt.show()
```

<class 'module'>

3D Points

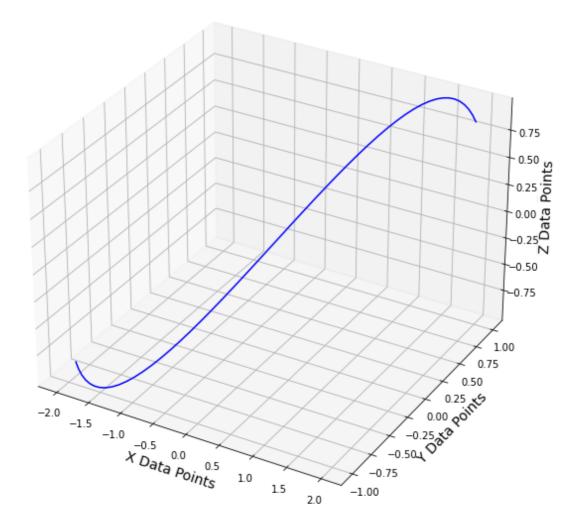


In [4]:

```
# Plotting 3D line
plt.figure(figsize=[15,10])

ax = plt.axes(projection="3d")
ax.set_title("3D Points", fontsize=16)
ax.set_xlabel("X Data Points", fontsize=14)
ax.set_ylabel("Y Data Points", fontsize=14)
ax.set_zlabel("Z Data Points", fontsize=14)
ax.plot3D(x2,np.sin(y2),np.sin(z2), color="blue", alpha=1)
plt.show()
```

3D Points



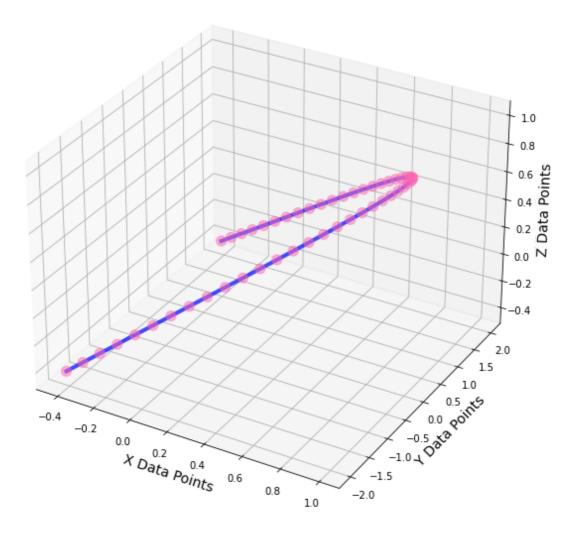
In [5]:

```
# Plotting 3D Points & Line
plt.figure(figsize=[15,10])

ax = plt.axes(projection="3d")
ax.set_title("3D Points", fontsize=16)
ax.set_xlabel("X Data Points", fontsize=14)
ax.set_ylabel("Y Data Points", fontsize=14)
ax.set_zlabel("Z Data Points", fontsize=14)

ax.scatter3D(np.cos(x2),y2,np.cos(z2), color="hotpink", s=100, alpha=0.5)
ax.plot3D(np.cos(x2),y2,np.cos(z2), color="blue", linewidth=4, alpha=0.7)
plt.show()
```

3D Points



In []: