

```
In[2182]:= Remove[x, y, z, sigma, r, b, r]
```

```
x'[t] = sigma * (y - x);  
y'[t] = r * x - y - x * z;  
z'[t] = x * y - b * z;
```

```
sol = Solve[{x'[t] == 0, y'[t] == 0, z'[t] == 0}];
```

```
J = {{D[x'[t], x], D[x'[t], y], D[x'[t], z]},  
      {D[y'[t], x], D[y'[t], y], D[y'[t], z]}, {D[z'[t], x], D[z'[t], y], D[z'[t], z]}}
```

```
lambda = Eigenvalues[J];
```

```
Remove[x, y, z, sigma, b, s, t]
```

```
r = 28;
```

```
b = 8 / 3;
```

```
sigma = 10;
```

```
s = NDSolve[{x'[t] == sigma * (y[t] - x[t]), y'[t] == r * x[t] - y[t] - x[t] * z[t],  
            z'[t] == x[t] * y[t] - b * z[t], z[0] == x[0] == y[0] == 1},  
            {x, y, z}, {t, 0, 100}, Method -> "ExplicitRungeKutta"];
```

```
ParametricPlot3D[Evaluate[{x[t], y[t], z[t]} /. s], {t, 0, 50}]
```

... Remove: Symbol Removed[r] already removed.

```
Out[2187]= {{-sigma, sigma, 0}, {r - z, -1, -x}, {y, x, -b}}
```

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Out[2194]=
```

