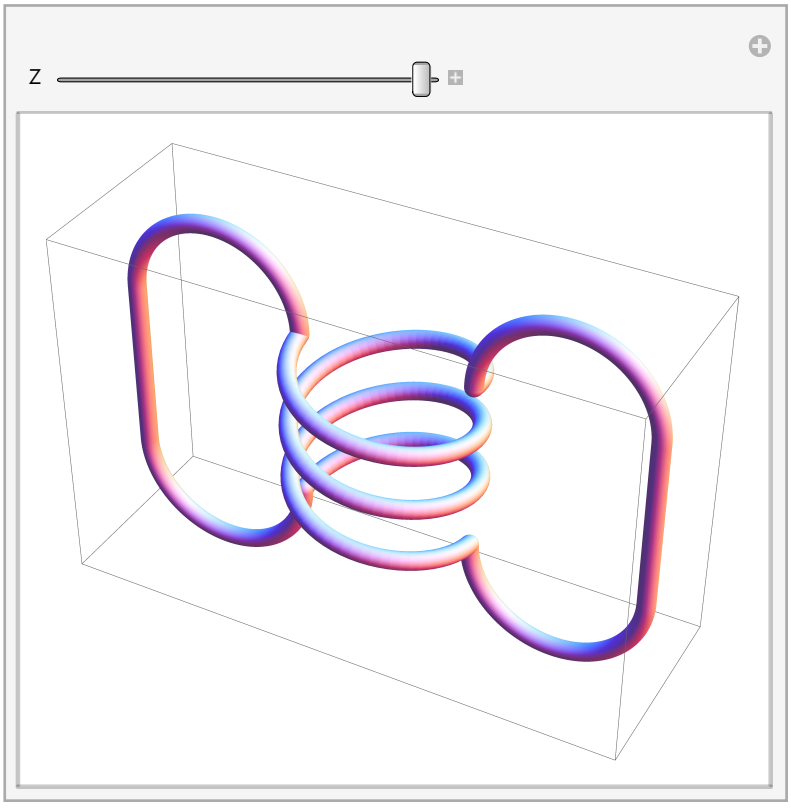
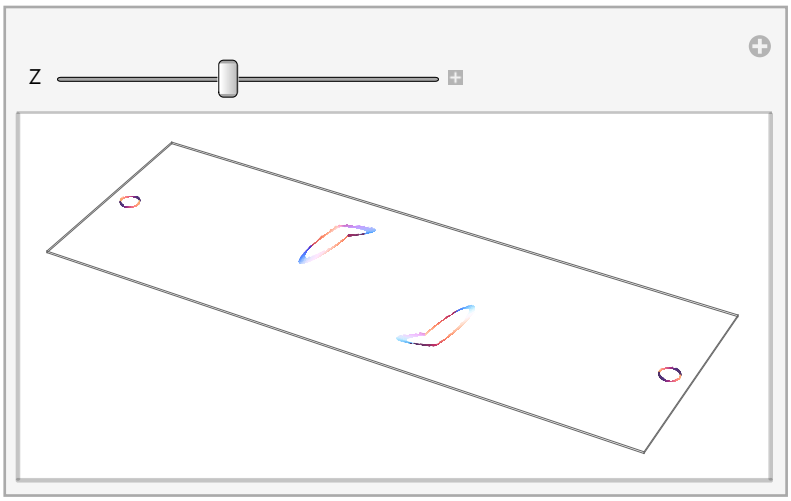
```
g[t_] := Which[
  0 ≤ (τ = t) < 1, {-Cos[3 π τ], Sin[3 π τ], 2 τ - 1},
  0 ≤ (τ -= 1) < 1, {2 - Cos[π τ], 0, 1 + Sin[π τ]},
  0 ≤ (τ -= 1) < 1, {3, 0, 1 - 2 τ},
  0 ≤ (τ -= 1) < 1, {2 + Cos[π τ], 0, -1 - Sin[π τ]},
  0 ≤ (τ -= 1) < 1, {Cos[3 π τ], -Sin[3 π τ], 2 τ - 1},
  0 ≤ (τ -= 1) < 1, {-2 + Cos[π τ], 0, 1 + Sin[π τ]},
  0 ≤ (τ -= 1) < 1, {-3, 0, 1 - 2 τ},
  0 ≤ (τ -= 1) ≤ 1, {-2 - Cos[π τ], 0, -1 - Sin[π τ]}
 ]

g1[t_] := g[t] /. {
   {x_, y_, z_} /; -1 ≤ z ≤ 1 :> {x, y, 3 z},
   {x_, y_, z_} /; z > 1 :> {x, y, z + 2},
   {x_, y_, z_} /; z < -1 :> {x, y, z - 2}
  }

Manipulate[
 Graphics3D[Tube[
   Table[g[t], {t, 0, 8, 0.01}], 0.1
  ], PlotRange → {All, All, {-2.1, Z}}],
 {{Z, 2.1}, -2.1, 2.1}
]
```



```
Manipulate[
 Graphics3D[Tube[
   Table[g[t], {t, 0, 8, 0.1}], 0.1
  ], PlotRange → {All, All, {Z - 0.01, Z + 0.01}}],
 {{Z, 2.1}, -2.1, 2.1}
]
```



```
Manipulate[
 Graphics3D[Tube[
   Table[g1[t], {t, 0, 8, 0.01}], 0.1
  ], PlotRange → {All, All, {-4.1, Z}}],
 {{Z, 4.1}, -4.1, 4.1}
]
```