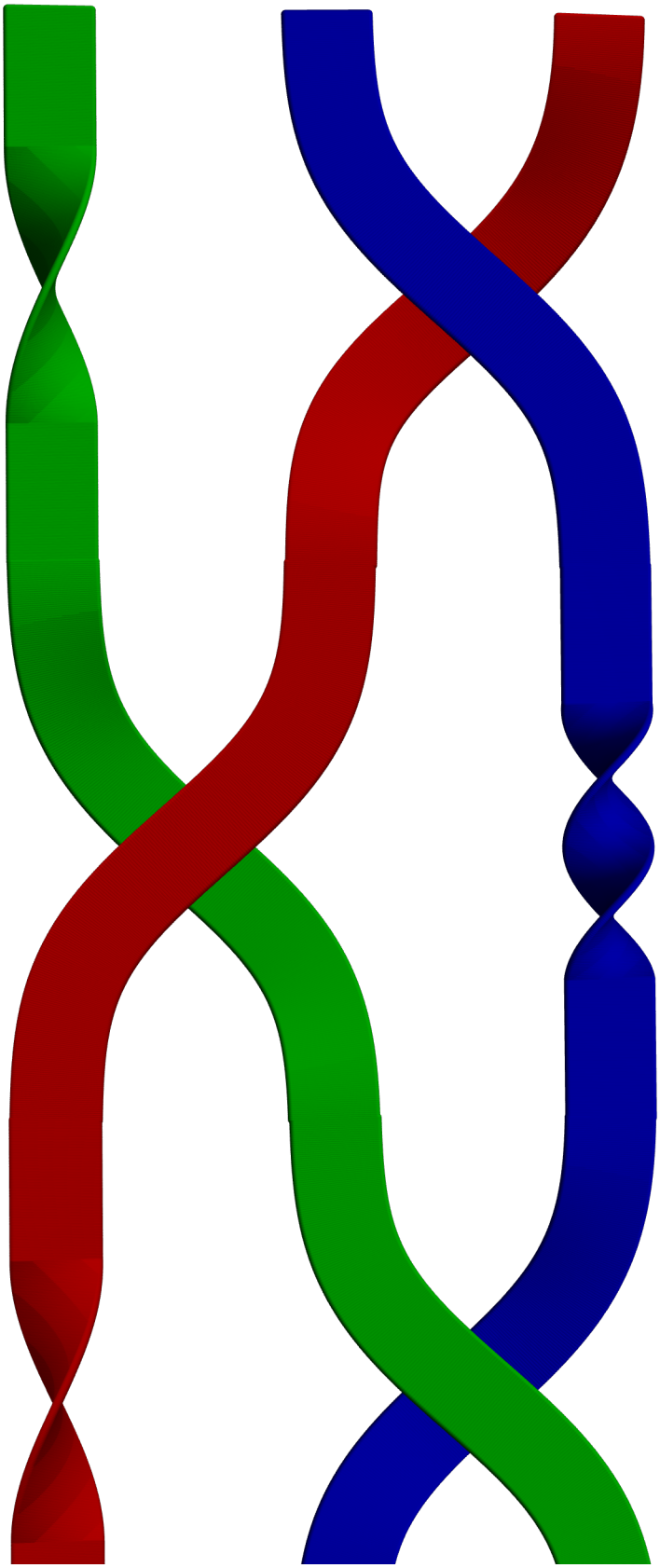
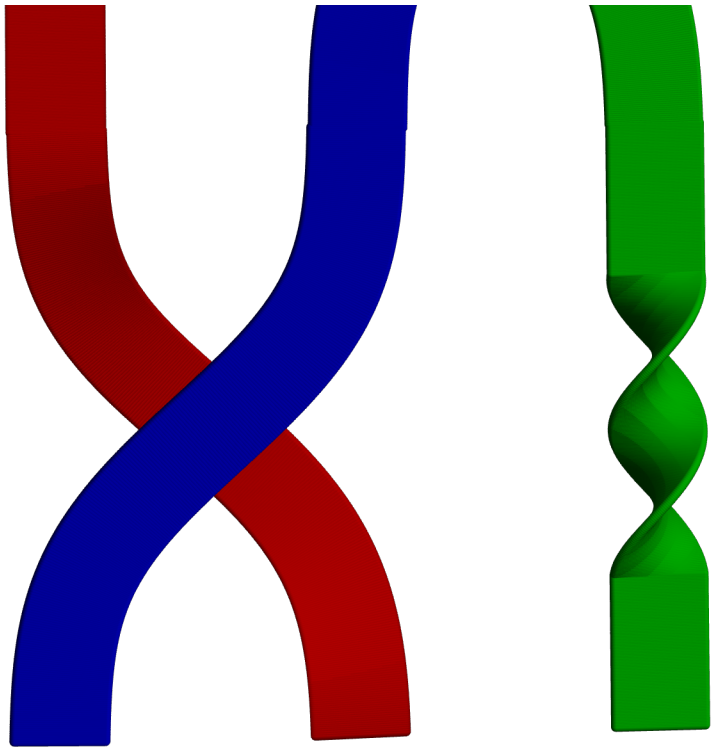
In[•]:=
```
(*N-twist Segment*)
Twist[NumTwist_, Position_, Color_, Scale_] := Module[{PartA, PartB, PartC},
   PartA = Show[ParallelTable[Graphics3D[
       {Darker@Color, Tube[{{Position + {-Scale, 0, t}, Position + {Scale, 0, t}}}, 0.03]}],
      {t, 0, 1, 1 / 99}], ViewPoint → Front, Boxed → False];
   PartC = Show[ParallelTable[Graphics3D[
       {Darker@Color, Tube[{{Position + {-Scale, 0, t}, Position + {Scale, 0, t}}}, 0.03]}],
      {t, 3, 4, 1 / 99}], ViewPoint → Front, Boxed → False];
   PartB = Show[Table[Graphics3D[{Darker@Color, Arrowheads[0.0], Arrow[Tube[{{0, 0, 1} +
             Position + {-Scale Cos[NumTwist π z / 2], -Scale Sin[NumTwist π z / 2], z},
            {0, 0, 1} + Position + {Scale Cos[NumTwist π z / 2], Scale Sin[NumTwist π z / 2], z}},
           0.03]]}], {z, 0, 2, 1 / 99}], ViewPoint → Front, Boxed → False];
   Return[Show[PartA, PartB, PartC]]];

(*Crossing *)
Crossing[Position_, Direction_, Cross_, Color_, Scale_] :=
 Module[{Dir, Basis, tangent, normal, binormal, Stuff, Under},
  Dir = If[Direction == "Right", -1, 1];
  Under = If[Cross == "Under", 1, 0];
  Basis = Last[FrenetSerretSystem[{Dir Erf[t], 0, t}, t]] // FullSimplify;
  {tangent, normal, binormal} =
   Map[Arrow[{{Dir Erf[t], 0, t}, {Dir Erf[t], 0, t} + #}] &, Basis];
  Stuff = Show[ParallelTable[
     Graphics3D[{Darker@Color, Tube[{{Under {0, 0.3, 0} + Position + {Dir Erf[t],
             Under 0.3 (Cos[π t / 2]), t} - Scale N[Basis[[2]]], Under {0, 0.3, 0} + Position +
            {Dir Erf[t], 0.3 (Under Cos[π t / 2]), t} + Scale N[Basis[[2]]]}}, 0.03]}],
     {t, -2, 2, 4 / (300 - 1)}], ViewPoint → Front, Boxed → False];
  Return[Stuff]
 ]


Strand1 = Show[Twist[1, {-3, 0, -2}, Pantone7664, 0.3],
   Crossing[{-2, 0, -4}, "Right", "Under", Pantone7664, 0.3], Crossing[{0, 0, -8},
    "Right", "Over", Pantone7664, 0.3], Twist[2, {1, 0, -14}, Pantone7664, 0.3]];

Strand3 = Show[Crossing[{0, 0, 0}, "Left", "Under", Pantone149, 0.3],
   Crossing[{-2, 0, -4}, "Left", "Over", Pantone149, 0.3], Twist[1, {-3, 0, -10},
    Pantone149, 0.3], Crossing[{-2, 0, -12}, "Right", "Under", Pantone149, 0.3]];

Strand2 = Show[Crossing[{0, 0, 0}, "Right", "Over", Lighter@Pantone199, 0.3],
   Twist[2, {1, 0, -6}, Lighter@Pantone199, 0.3],
   Crossing[{0, 0, -8}, "Left", "Under", Lighter@Pantone199, 0.3],
   Crossing[{-2, 0, -12}, "Left", "Over", Lighter@Pantone199, 0.3]];
```

In[•]:=
```
Show[Strand1, Strand2, Strand3]
```

Out[•]=





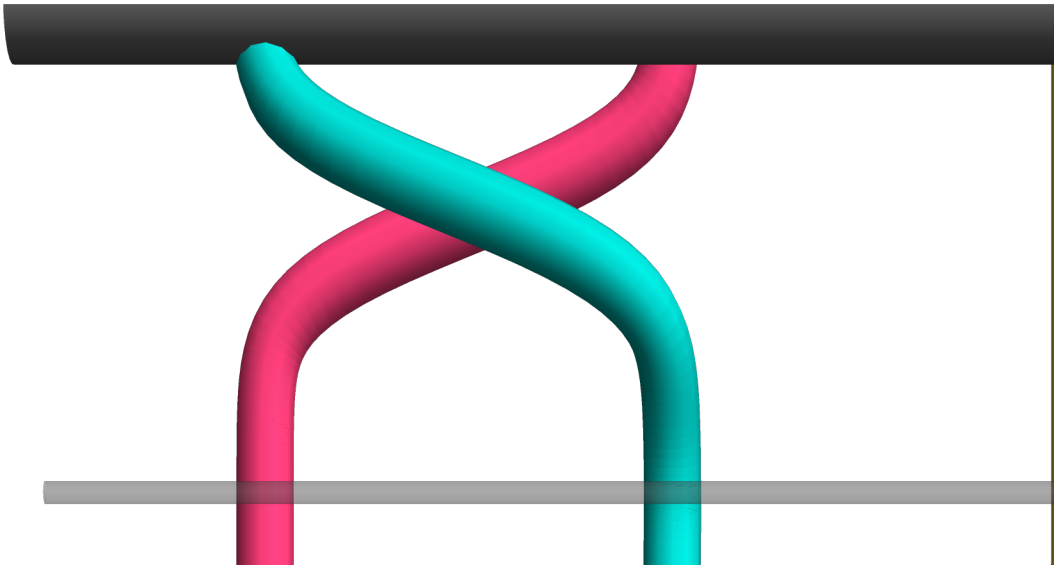
Braids

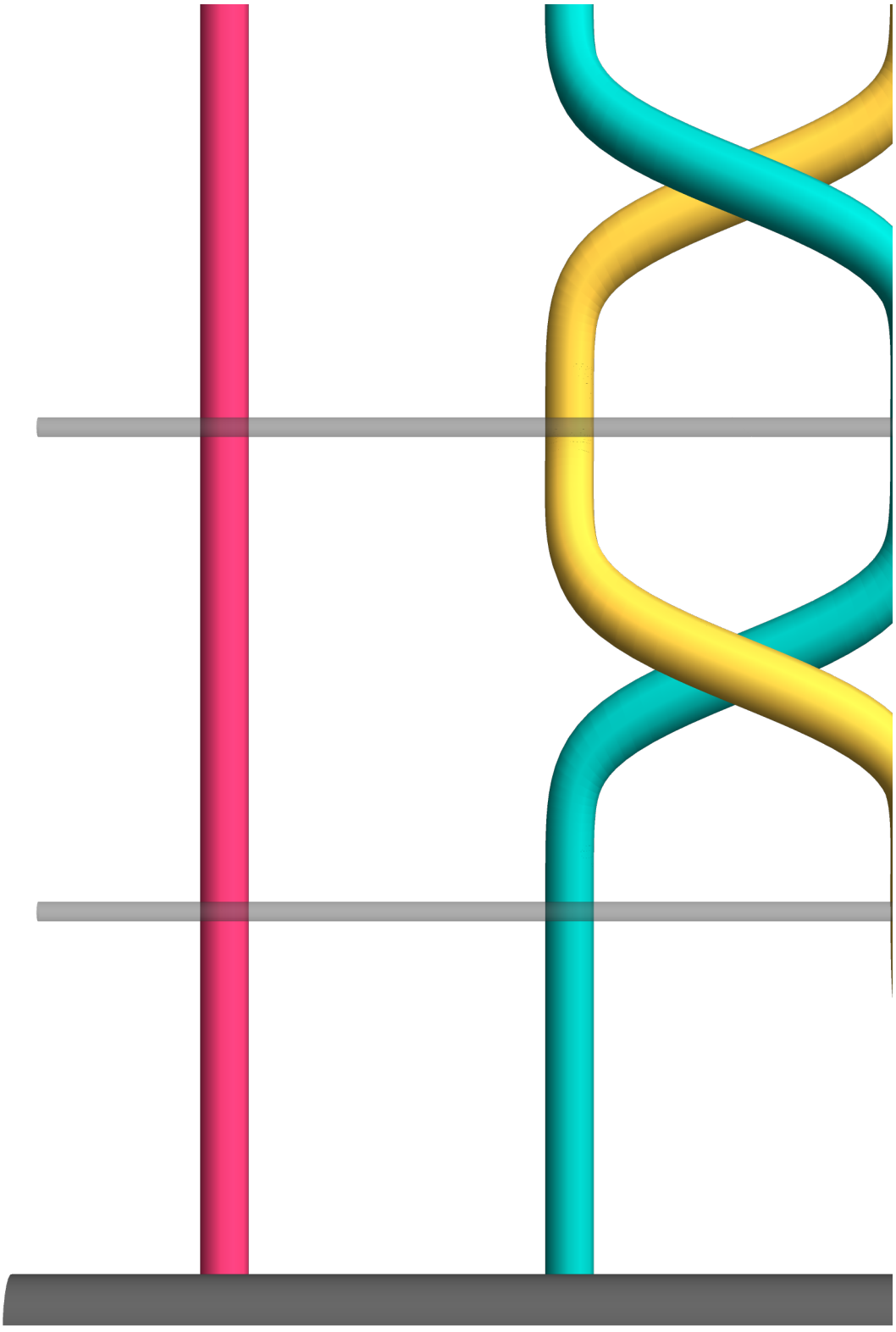
```
(*Crossing *)
BCrossing[Position_, Direction_, Cross_, Color_, Scale_] :=
 Module[{Dir, Basis, tangent, normal, binormal, Stuff, Under},
Dir = If[Direction == "Right", -1, 1];
Under = If[Cross == "Under", 1, 0];
Stuff =
   Show[ParallelTable[Graphics3D[{Darker@Color, Tube[{{Under {0, 0.3, 0} + Position + {Dir
              Erf[t], Under 0.3 (Cos[ π t / 2]), t} - Scale N[Basis⟦2⟧], Under {0, 0.3, 0} +
           Position + {Dir Erf[t], 0.3 (Under Cos[π t / 2]), t} + Scale N[Basis⟦2⟧]}}, 0.03]}],
     {t, -2, 2, 4 / (300 - 1)}], ViewPoint → Front, Boxed → False];
Return[Stuff]
]
```

In[•]:=
```
Strand[Position_, Color_] :=
  Graphics3D[{Color, CapForm["Butt"], Tube[{Position, Position + {0, 1, 0}}, 0.07]}];

BCrossing[Position_, Direction_, Cross_, Color_] := Module[{Dir, Stuff, Under},
  Dir = If[Direction == "Right", -1, 1];
  Under = If[Cross == "Under", 0, 1];
  ParametricPlot3D[Position + {0.5, 0.5, Under 0.1} +
     {Dir Erf[3 t] / 2, t / 2, Under 0.1 (Cos[π t])}, {t, -1, 1}, PlotStyle → Color] /.
   Line[pts_, rest___] :→ {CapForm["Butt"], Tube[pts, 0.07, rest]}
 ]
```

In[•]:=
```
Show[Graphics3D[{Darker@Gray, CapForm["Square"],
   Tube[{{-0.5, 0.85, 0.1}, {3.5, 0.85, 0.1}}, 0.1]}], Graphics3D[
  {Darker@Gray, CapForm["Square"], Tube[{{-0.5, -2.85, 0.1}, {3.5, -2.85, 0.1}}, 0.1]}],
 BCrossing[{0, 0, 0}, "Right", "Up", Pantone2459],
 BCrossing[{0, 0, 0}, "Left", "Under", Pantone199],
 Strand[{2, 0, 0}, Pantone149], Strand[{3, 0, 0}, Pantone7664],
 Strand[{0, -1, 0}, Pantone199], BCrossing[{1, -1, 0}, "Right", "Up", Pantone2459],
 BCrossing[{1, -1, 0}, "Left", "Under", Pantone149], Strand[{3, -1, 0}, Pantone7664],
 Strand[{0, -2, 0}, Pantone199], BCrossing[{1, -2, 0}, "Left", "Under", Pantone2459],
 BCrossing[{1, -2, 0}, "Right", "Up", Pantone149], Strand[{3, -2, 0}, Pantone7664],
 Strand[{0, -3, 0}, Pantone199], Strand[{1, -3, 0}, Pantone2459],
 BCrossing[{2, -3, 0}, "Right", "Up", Pantone149],
 BCrossing[{2, -3, 0}, "Left", "Under", Pantone7664],
 Graphics3D[{{Opacity[0.3], Darker@Gray, CapForm["Square"],
    Tube[{{-0.5, -1, 0.1}, {3.5, -1, 0.1}}, 0.02]}, {Opacity[0.3], Darker@Gray,
    CapForm["Square"], Tube[{{-0.5, -0, 0.1}, {3.5, -0, 0.1}}, 0.02]}, {Opacity[0.3],
    Darker@Gray, CapForm["Square"], Tube[{{-0.5, -2, 0.1}, {3.5, -2, 0.1}}, 0.02]}}],
 Boxed → False, Axes → False, PlotRange → {{-1, 4}, {0.8, -2.8}, {.5, -0.5}},
 ViewPoint → Above, Lighting → "Neutral", AspectRatio → 7 / 7]
```

Out[•]=





```
(ParametricPlot3D[Position + {0.5, 0, Under 0.1} +
     {Direction Erf[3 t] / 2, t, Under (Cos[π t])}, {t, -1, 1}, PlotStyle → Pantone7664] /.
   Line[pts_, rest___] :→ {CapForm["Butt"], Tube[pts, 0.1, rest]}) /.
 {Position → {0, 0, 0}, Under → 0, Direction → 0.}
```