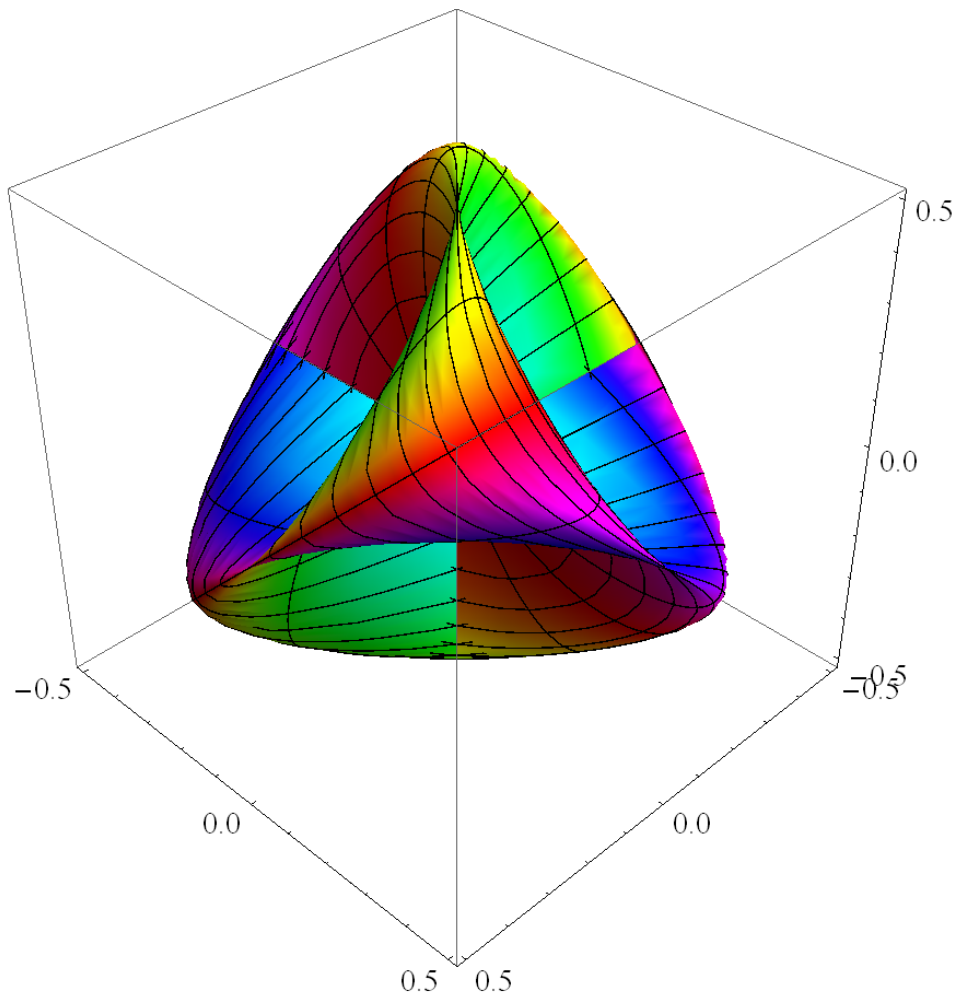Pensieve Header: Embedding RP^2 in R^4, following Hillman.

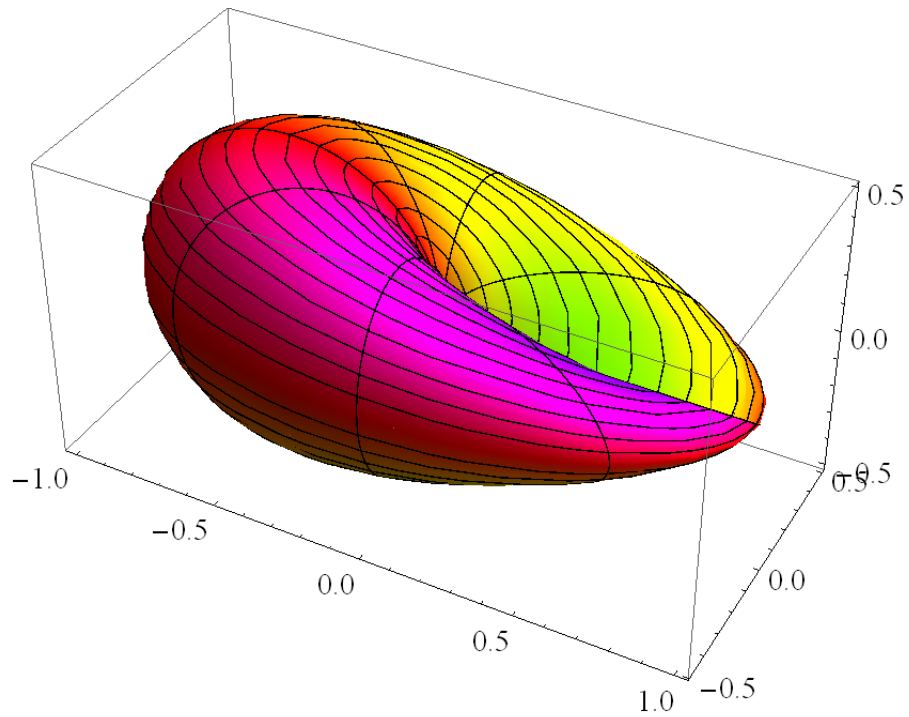```
{x, y, z} = {Cos[t] Cos[s], Cos[t] Sin[s], Sin[t]};
f = {x^2 - y^2, x y, y z, x z};

Rasterize[
 {c, h1, h2, h3} = f;
 ParametricPlot3D[
  {h1, h2, h3}, {t, 0, Pi / 2}, {s, -Pi, Pi},
  ColorFunction → (Hue[c / 2 /. {t → #4, s → #5}] &),
  ColorFunctionScaling → False, ViewPoint → {2, 2, 2}
 ], RasterSize → 1024
]
```

```
Rasterize[
 {h1, h2, h3, c} = f;
 ParametricPlot3D[
  {h1, h2, h3}, {t, 0, Pi / 2}, {s, -Pi, Pi},
  ColorFunction → (Hue[c / 2 /. {t → #4, s → #5}] &),
  ColorFunctionScaling → False
 ], RasterSize → 1024
]
```



```
c
```

```
Cos[s] Cos[t] Sin[t]
```

```
g = {
    {1, 0, 0, 0},
    {0, 1, 0, 0},
    {0, 0, 0, 1},
    {0, 0, 1, 0}
   }.f;
g = f;
True || (g = Table[2 Random[] - 1, {4}, {4}].f);
```