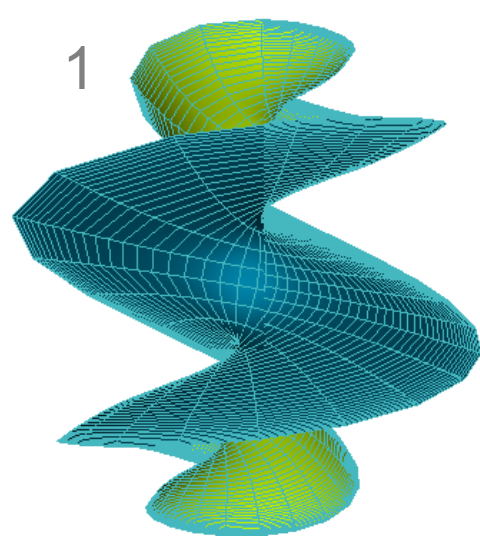
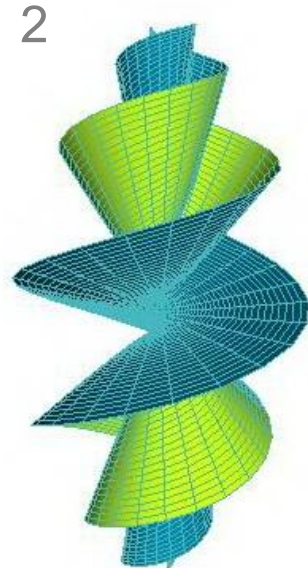


1



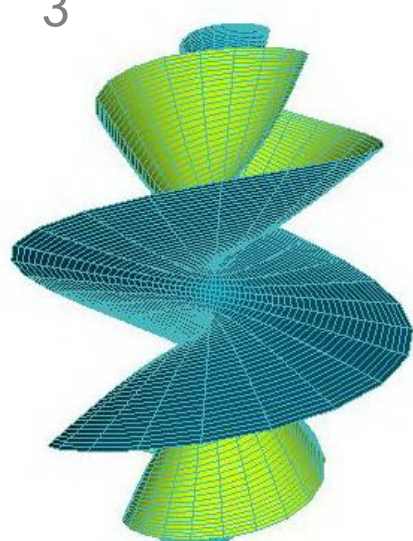
$$\begin{aligned} X &= (\sinh(v) \cdot \cos(3 \cdot u)) / (1 + \cosh(u) \cdot \cosh(v)) \\ Y &= (\sinh(v) \cdot \sin(3 \cdot u)) / (1 + \cosh(u) \cdot \cosh(v)) \\ Z &= (\cosh(v) \cdot \sinh(u)) / (1 + \cosh(u) \cdot \cosh(v)) \\ &- \pi < u < \pi ; - \pi < v < \pi \end{aligned}$$

2



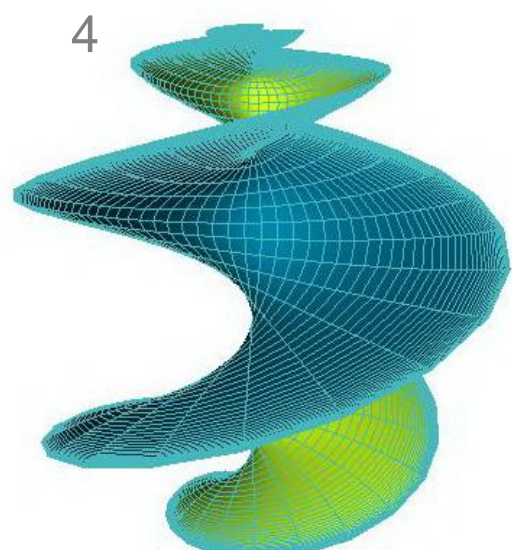
$$\begin{aligned} X &= (\sinh(v) \cdot \cos(3 \cdot u)) / (12 + \cosh(u) \cdot \cosh(v)) \\ Y &= (\sinh(v) \cdot \sin(3 \cdot u)) / (12 + \cosh(u) \cdot \cosh(v)) \\ Z &= (\cosh(v) \cdot \sinh(u)) / (12 + \cosh(u) \cdot \cosh(v)) \\ &- \pi < u < \pi ; - \pi < v < \pi \end{aligned}$$

3



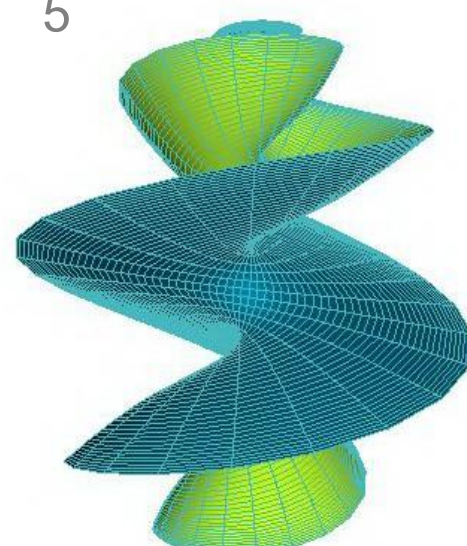
$$\begin{aligned} X &= (\sinh(v) \cdot \cos(3 \cdot u)) / (4 + \cosh(u) \cdot \cosh(v)) \\ Y &= (\sinh(v) \cdot \sin(3 \cdot u)) / (4 + \cosh(u) \cdot \cosh(v)) \\ Z &= (\cosh(v) \cdot \sinh(u)) / (4 + \cosh(u) \cdot \cosh(v)) \\ &- \pi < u < \pi ; - \pi < v < \pi \end{aligned}$$

4



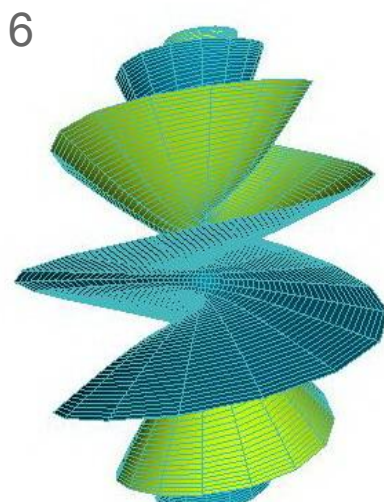
$$\begin{aligned} X &= (\sinh(v) \cdot \cos(3 \cdot u)) / (0.4 + \cosh(u) \cdot \cosh(v)) \\ Y &= (\sinh(v) \cdot \sin(3 \cdot u)) / (0.4 + \cosh(u) \cdot \cosh(v)) \\ Z &= (\cosh(v) \cdot \sinh(u)) / (0.4 + \cosh(u) \cdot \cosh(v)) \\ &- \pi < u < \pi ; - \pi < v < \pi \end{aligned}$$

5



$$\begin{aligned} X &= (\sinh(v) \cdot \cos(3 \cdot u)) / (2 + \cosh(u) \cdot \cosh(v)) \\ Y &= (\sinh(v) \cdot \sin(3 \cdot u)) / (2 + \cosh(u) \cdot \cosh(v)) \\ Z &= (\cosh(v) \cdot \sinh(u)) / (2 + \cosh(u) \cdot \cosh(v)) \\ &- \pi < u < \pi ; - \pi < v < \pi \end{aligned}$$

6



$$\begin{aligned} X &= (\sinh(v) \cdot \cos(4 \cdot u)) / (4 + \cosh(u) \cdot \cosh(v)) \\ Y &= (\sinh(v) \cdot \sin(4 \cdot u)) / (4 + \cosh(u) \cdot \cosh(v)) \\ Z &= (\cosh(v) \cdot \sinh(u)) / (4 + \cosh(u) \cdot \cosh(v)) \\ &- \pi < u < \pi ; - \pi < v < \pi \end{aligned}$$

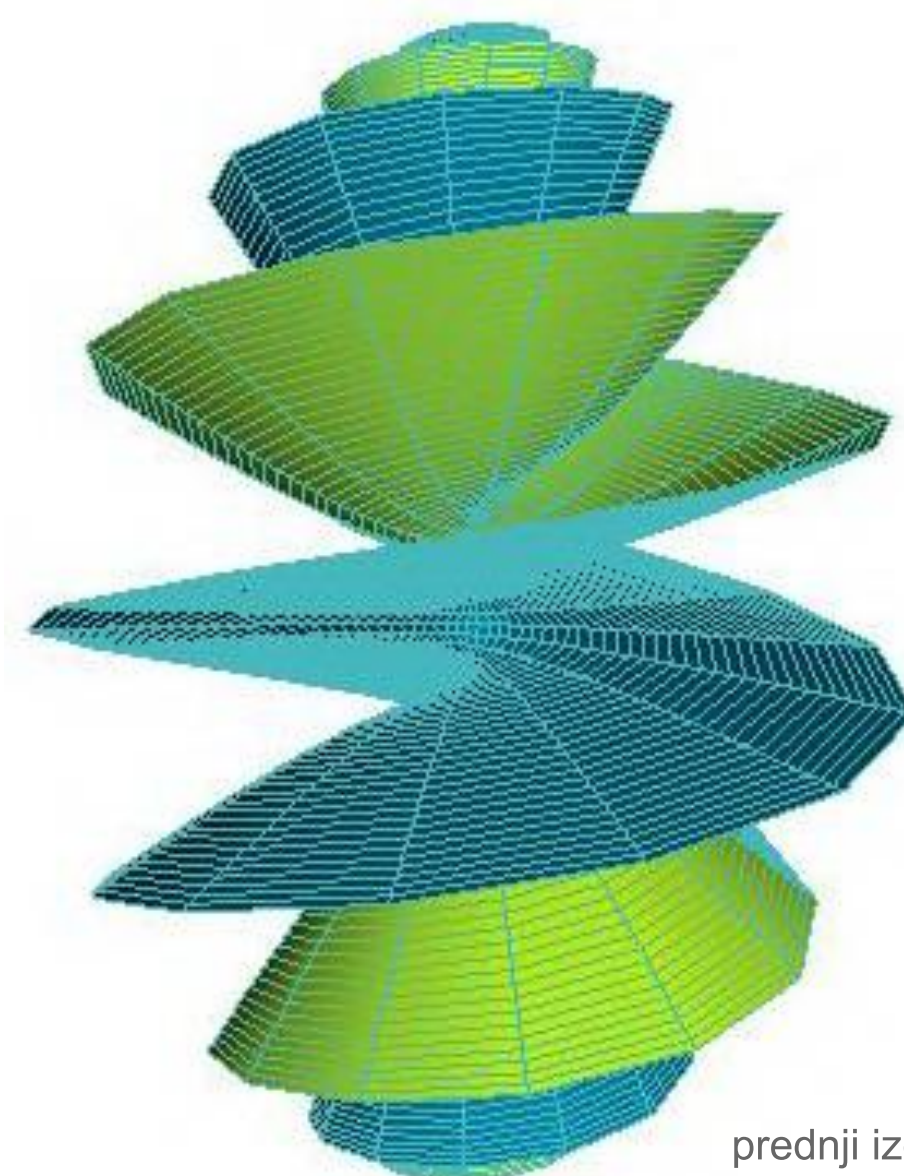
Površ i prostoru

Površ je dvoparametarski skup tačaka u prostoru, tj. skup tačaka prostora čije su koordinate funkcije dva parametra u i v . Ako su u i v krivolinijske koordinate na površi, onda se površ može odrediti jednačinama:

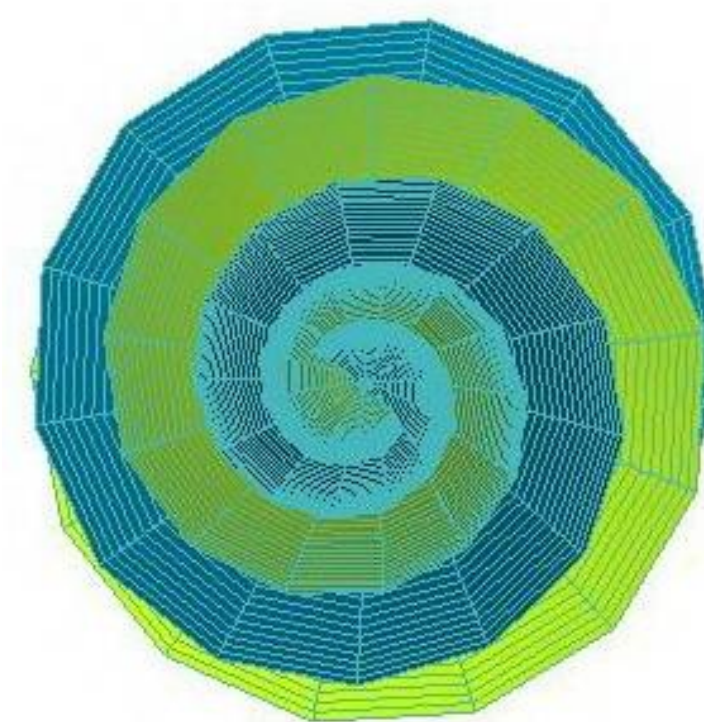
$$x=f(u,v), y=g(u,v), z=h(u,v).$$

Jedan od primera površi u prostoru je hiperhelikoid (1). Promenom određenih parametara funkcije menja se i površ (matematičko istraživanje kroz primere 2, 3, 4...). Kao krajnji produkt analize dobijena je veoma arhitektonična forma, sa potencijalom da postane deo urbanog konteksta.

$$\begin{aligned} X &= f(u,v) = (\sinh(v) \cdot \cos(5 \cdot u)) / (4 + \cosh(u) \cdot \cosh(v)) \\ Y &= g(u,v) = (\sinh(v) \cdot \sin(5 \cdot u)) / (4 + \cosh(u) \cdot \cosh(v)) \\ Z &= h(u,v) = (\cosh(v) \cdot \sinh(u)) / (4 + \cosh(u) \cdot \cosh(v)) \\ &- \pi < u < \pi ; - \pi < v < \pi \end{aligned}$$



prednji izgled



osnova

