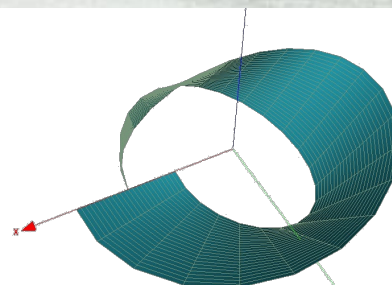
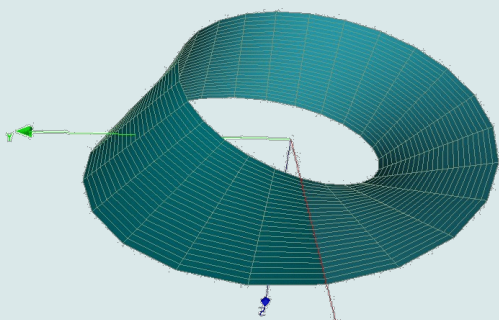


# MATEMATIKA U ARHITEKTURI 2

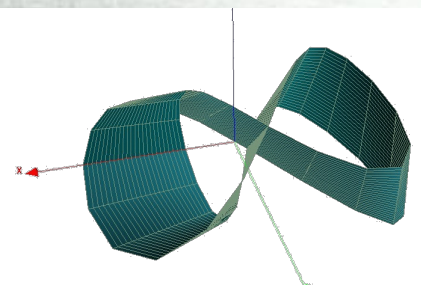
Arhitektonski fakultet Univerziteta u Beogradu; Prof. dr Ljiljana Petruševski; Student Jovana Kolašinac, 2013/161



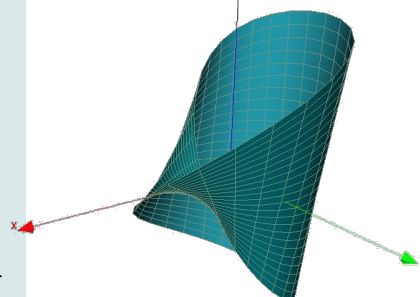
## POVRŠI U PROSTORU



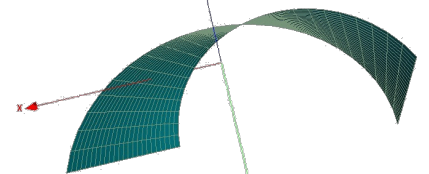
$$\begin{aligned} X f(u,v) &= \cos(v) + u * \cos(0.5 * (v/2)) * \cos(v) \\ Y f(u,v) &= \sin(v) + u * \cos(v/2) * \sin(v) \\ Z f(u,v) &= u * \sin(v/2) \\ -0.4 &\leq u \leq 0.4 \\ 0 &\leq v \leq 2 * \pi \end{aligned}$$



$$\begin{aligned} X f(u,v) &= \cos(v) + u * \cos(0.5 * v/2) * \cos(v) \\ Y f(u,v) &= 2 * \sin(v) + u * \cos(v/2) * \sin(v) \\ Z f(u,v) &= u * \sin(v/2) \\ -0.4 &\leq u \leq 0.4 \\ 0 &\leq v \leq 2 * \pi \end{aligned}$$



$$\begin{aligned} X f(u,v) &= \cos(v) + u * \cos(v/2) * \cos(v) \\ Y f(u,v) &= \sin(v) + u * \cos(v/2) * \sin(v) \\ Z f(u,v) &= 5 * u * \sin(v/2) \\ -0.4 &\leq u \leq 0.4 \\ 0 &\leq v \leq 2 * \pi \end{aligned}$$



$$\begin{aligned} X f(u,v) &= \cos(v) + u * \cos(v/2) * \cos(v) \\ Y f(u,v) &= \sin(v) + u * \cos(v/2) * \sin(v) \\ Z f(u,v) &= u * \sin(v/2) \\ -0.4 &\leq u \leq 0.4 \\ \pi &\leq v \leq 2 * \pi \end{aligned}$$

Inicijalna forma-jednačina Moebius-ove trake.

$$\begin{aligned} X f(u,v) &= \cos(v) + u * \cos(v/2) * \cos(v) \\ Y f(u,v) &= \sin(v) + u * \cos(v/2) * \sin(v) \\ Z f(u,v) &= u * \sin(v/2) \\ -0.4 &\leq u \leq 0.4 \\ 0 &\leq v \leq 2 * \pi \end{aligned}$$

Izmenom prvobitne forme jednačine Moebius-ove trake dobija se arhitektonični objekat, koji svojom strukturom podseća na vrstu nadstrešnice i može se smestiti u urbani prostor.