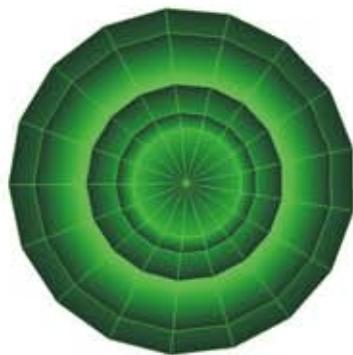


MATEMATIKA U ARHITEKTURI 1

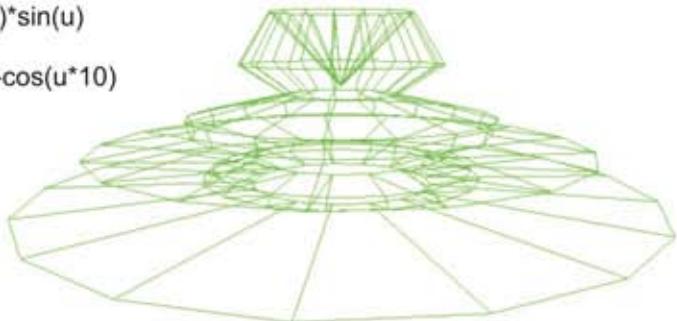
Arhitektonski fakultet Univerziteta u Beogradu; Prof. dr Ljiljana Petruševski; Student Jovana Filić 2011/007

ROTACIONE POVRŠI



Prikaz odozgo

$$\begin{aligned} X=f(u) & \quad \sin(u^{1/3}) \cdot \sin(u) \\ y=g(u) & \quad \log_{10}(u) \\ z=h(u) & \quad \log_{10}(u) - \cos(u^{10}) \\ 0 \leq u \leq 2\pi & \end{aligned}$$



Linearni model



Poprecni presek

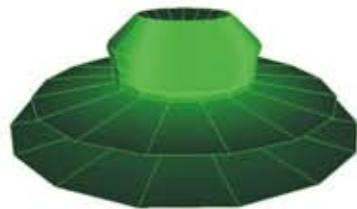
Objekat je dobijen rotacijom povrsi oko y ose i predstavlja klupu za sedenje, sa zardinjerom za drvece u sredini. Ideja je bila prikazati kako matematičke funkcije mogu imati znacajnu ulogu u arhitekturi i urbanizmu, za stvaranje razlicitih kreativnih ideja, poput intervencija u javnim prostorima, kao sto je ovaj.



$$\begin{aligned} X=f(u) & \quad \sin(u^{1/3}) \cdot \sin(u) \\ y=g(u) & \quad \log_{10}(u) \\ z=h(u) & \quad \log_{10}(u) - \cos(u^{10}) \\ 0 \leq u \leq 6\pi & \end{aligned}$$



$$\begin{aligned} X=f(u) & \quad \sin(u^2) \cdot \cos(3u) \\ y=g(u) & \quad \log_{10}(u) \\ z=h(u) & \quad \log_{10}(u) - \cos(u^{10}) \\ 0 \leq u \leq 6\pi & \end{aligned}$$



$$\begin{aligned} X=f(u) & \quad \sin(u^{1/3}) \cdot \sin(u) \\ y=g(u) & \quad \log_{10}(u)^4 \\ z=h(u) & \quad \log_{10}(u) - \cos(u^{10}) \\ 0 \leq u \leq 2\pi & \end{aligned}$$



Korišćeni programi: K 3DSurf, Photoshop, CorelDraw.

Faculty of Architecture, University of Belgrade; Prof. Ljiljana Petruševski, PhD; Student Jovana Filić 2011/007
e-Learning support Mirjana Devetaković, MSc; Virtual learning environment for the course <http://www.arh.bg.ac.yu/code/navigate.asp?Id=2420>

MATHEMATICS IN ARCHITECTURE 1