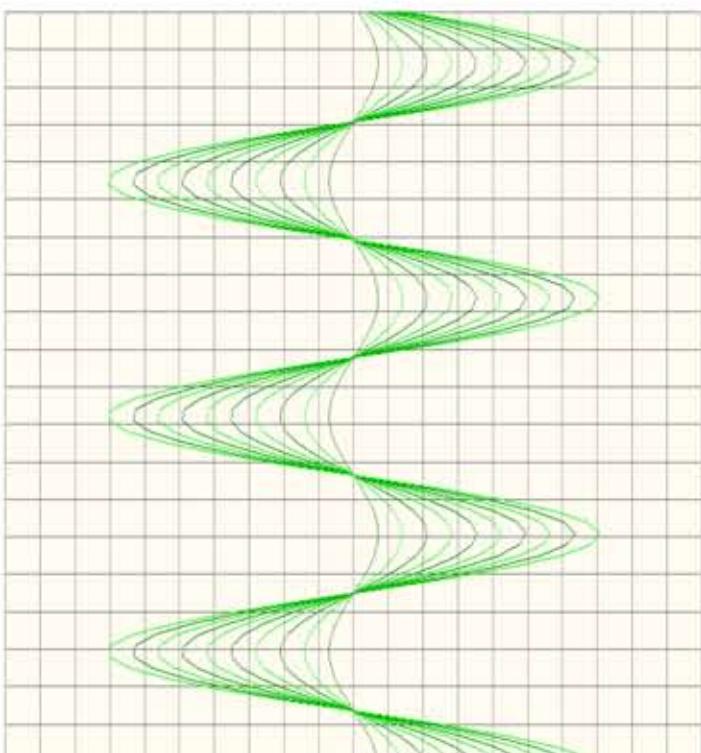


MATEMATIKA U ARHITEKTURI 2

Arhitektonski fakultet Univerziteta u Beogradu; Prof. dr Ljiljana Petruševski; Student Darja Filipović, 2009/115

KRIVA U PROSTORU



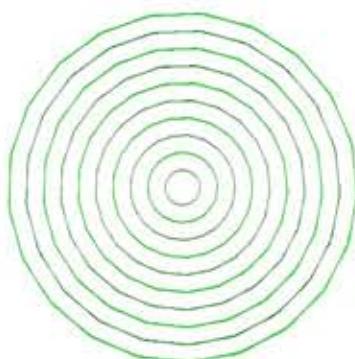
Koristeći program 3D Grapher napravila sam krivu u prostoru.

Funkcije krive su :

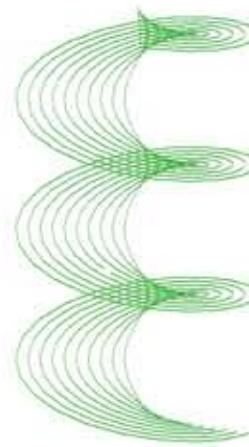
Graph1: $X=0.5*\sin(v)-\cos(v)*0.5$, $Y=0.5*\cos(v)+\sin(v)*0.5$, $Z=v$
Graph2: $X=1*\sin(v)-\cos(v)*1$, $Y=1*\cos(v)+\sin(v)*1$, $Z=v$
Graph3: $X=1.5*\sin(v)-\cos(v)*1.5$, $Y=1.5*\cos(v)+\sin(v)*1.5$, $Z=v$
Graph4: $X=2*\sin(v)-\cos(v)*2$, $Y=2*\cos(v)+\sin(v)*2$, $Z=v$
Graph5: $X=2.5*\sin(v)-\cos(v)*2.5$, $Y=2.5*\cos(v)+\sin(v)*2.5$, $Z=v$
Graph6: $X=3*\sin(v)-\cos(v)*3$, $Y=3*\cos(v)+\sin(v)*3$, $Z=v$
Graph7: $X=3.5*\sin(v)-\cos(v)*3.5$, $Y=3.5*\cos(v)+\sin(v)*3.5$, $Z=v$
Graph8: $X=4*\sin(v)-\cos(v)*4$, $Y=4*\cos(v)+\sin(v)*4$, $Z=v$
Graph9: $X=4.5*\sin(v)-\cos(v)*4.5$, $Y=4.5*\cos(v)+\sin(v)*4.5$, $Z=v$
Graph10: $X=5*\sin(v)-\cos(v)*5$, $Y=5*\cos(v)+\sin(v)*5$, $Z=v$

Granice krive su:

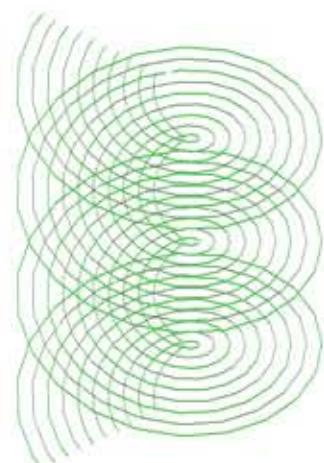
Min U : -15	Max U : 15	Steps= 100
Min V : -15	Max V : 15	Steps= 100



XOY



Rotirano



Izometrično

Prilikom promena granica i broja koraka a korišćenjem istih funkcija, dobijamo sledeći izgled krive :

Granice krive:

Min U : -5	Max U: 5	Steps= 50
Min V : -5	Max V: 5	Steps= 50

