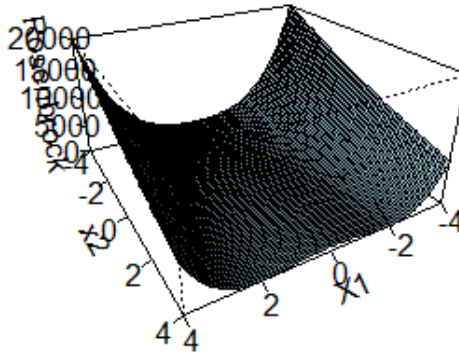


Deber seminario

Fausto Fabian Crespo Fernandez

Graficar la función de Rosenbrock:



Código en R:

```
x1=seq(-4, 4, 0.1)
```

```
x2=seq(-4, 4, 0.1)
```

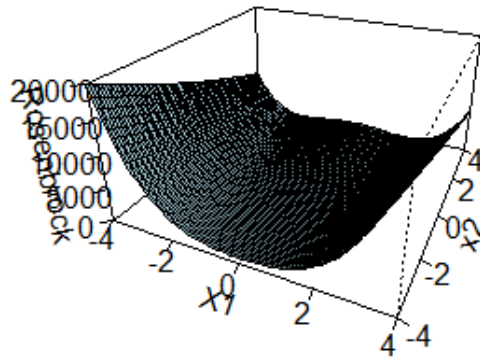
```
z <- outer(x1, x2, function(x1,x2) (1/2)*(100*(x2-(x1)^2)^2 +(1-x1)^2))
```

```
persp(x1, x2, z, theta = 150, phi = 27, expand = 0.5, col = "lightblue",
```

```
ltheta = 120, shade = 0.75, ticktype = "detailed",
```

```
xlab = "X1", ylab = "x2", zlab = "Rosenbrock") -> res
```

```
round(res, 3)
```



Código en R:

```
x1=seq(-4, 4, 0.1)
```

```
x2=seq(-4, 4, 0.1)
```

```
z <- outer(x1, x2, function(x1,x2) (1/2)*(100*(x2-(x1)^2)^2 +(1-x1)^2)
```

```
persp(x1, x2, z, theta = 25, phi = 27,expand = 0.5, col = "lightblue",
```

```
ltheta = 120, shade = 0.75, ticktype = "detailed",
```

```
xlab = "X1", ylab = "x2", zlab = "Rosenbrock") -> res
```

```
round(res, 3)
```