

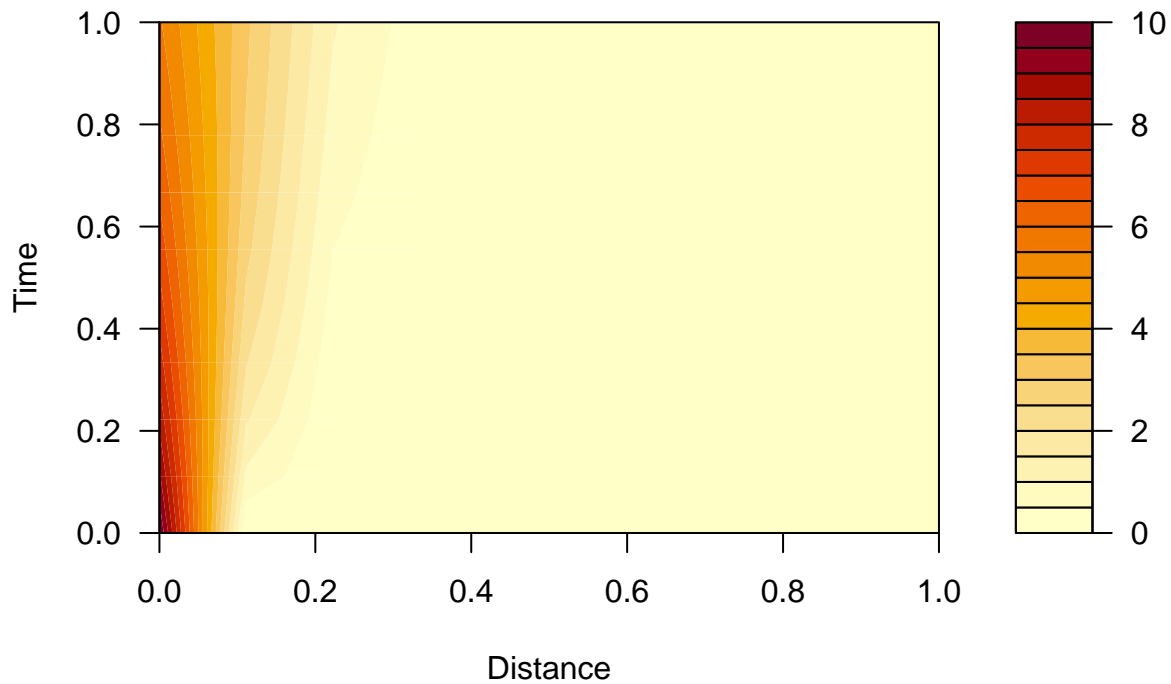
Diffusion

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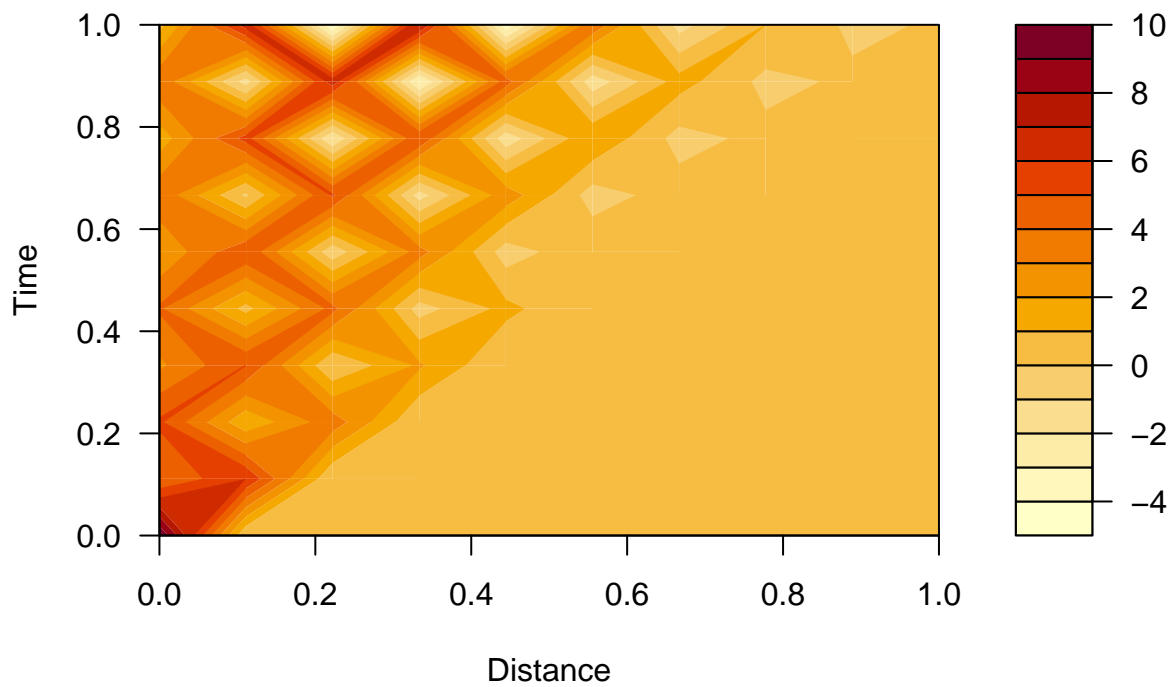
Initial plot from class

```
source(here::here("hw/functions/diffusion.R"))  
  
# Initial example  
res=diff1(initialC=10,nx=10,dx=1,nt=10,dt=30,D=0.006,area=1)  
filled.contour(t(res$conc), xlab="Distance", ylab="Time")
```



Example after changing the diffusivity parameter and time

```
# changing diffusivity  
res4=diff1(initialC=10,nx=10,dx=1,nt=10,dt=30,D=0.04,area=1)  
filled.contour(t(res4$conc), xlab="Distance", ylab="Time")
```



```
# changing time step  
res5=diff1(initialC=10,nx=10,dx=1,nt=10,dt=10,D=0.04,area=1)  
filled.contour(t(res5$conc), xlab="Distance", ylab="Time")
```

