

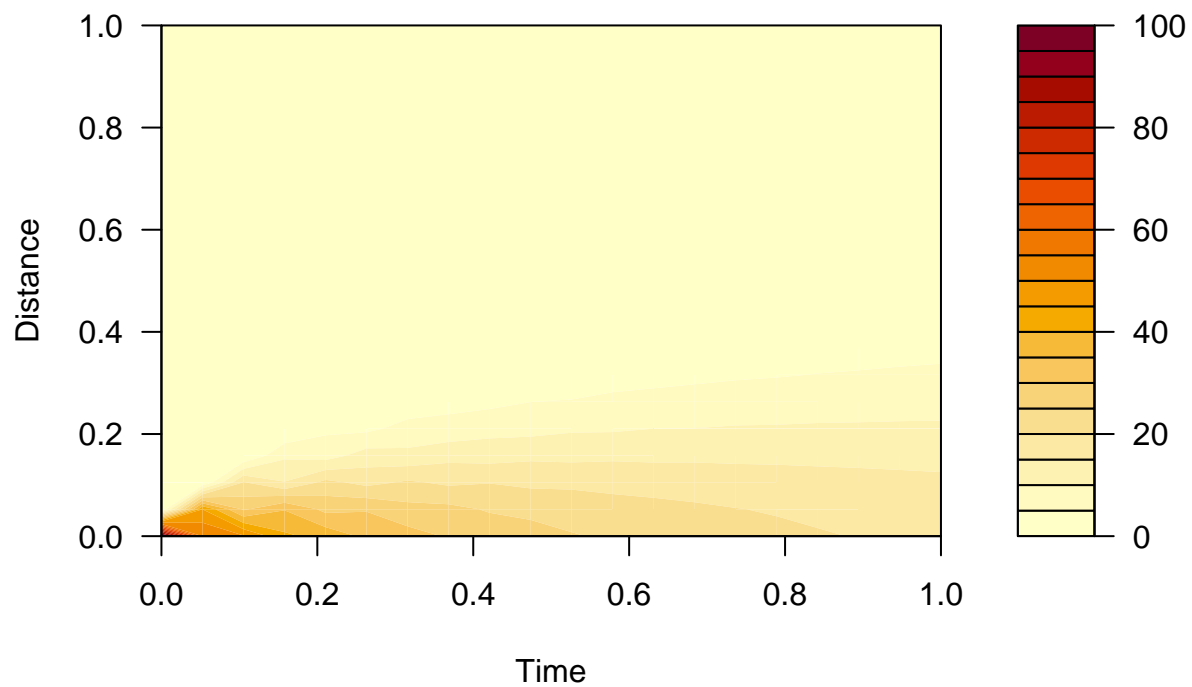
Diffusion Example

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play with time step, space step and parameters

```
# changes diffusivity and other parameters particularly  
# diffusivity, dx and dt  
  
# Looking at initial concentration of 100 and 20 meters in 1 meter intervals. Looking at a total of 10 meters  
res = diff1(initialC = 100,  
            nx=20,  
            dx=1,  
            nt=20,  
            dt=30,  
            D=0.03,  
            area=1)  
filled.contour(res$conc, xlab="Time", ylab="Distance")
```



```
# Looking at initial concentration of 100 and 20 meters in 1 meter intervals. Looking at a total of 2.5
res = diff1(initialC = 100,
            nx=20,
            dx=1,
            nt=20,
            dt=30,
            D=0.003,
            area=1)
filled.contour(res$conc, xlab="Time", ylab="Distance")
```

