

## Reaction Diffusion in one-dimensional space

```
In[80]:= << Graphics`Graphics3D`
```

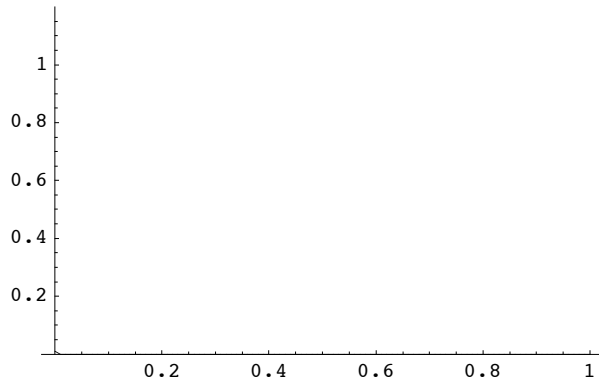
```
In[81]:= SetDirectory["/Users/takasu/home/Granada/
数值計算一般/拡散方程式/reaction_diffusion/build/development"]
```

```
Out[81]= /Users/takasu/home/Granada/数值計算一般/
拡散方程式/reaction_diffusion/build/Development
```

```
In[82]:= size = 101;
data = ReadList["RD-1dim-data", {Real, Real}];
data = Partition[data, size];
Length[data]
```

```
Out[85]= 3000
```

```
In[86]:= ListPlot[data[[1]], PlotRange -> {0, 1.2}, PlotJoined -> True]
```

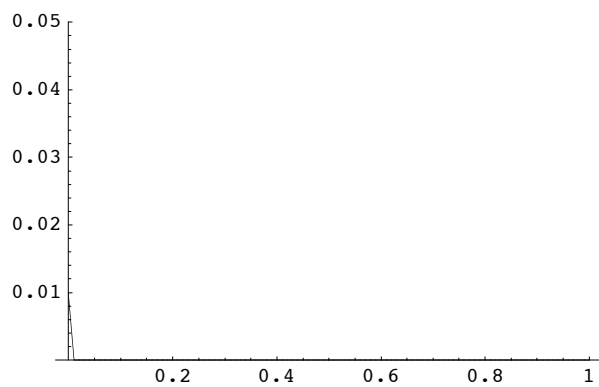


```
Out[86]= - Graphics -
```

```
In[87]:= data[[1]]
```

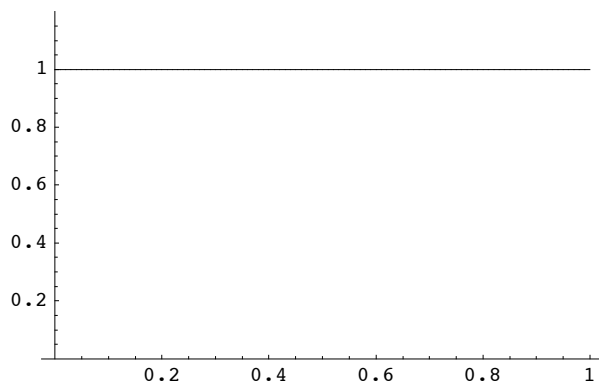
```
Out[87]= {{0., 0.01}, {0.01, 0.}, {0.02, 0.}, {0.03, 0.}, {0.04, 0.}, {0.05, 0.}, {0.06, 0.},
{0.07, 0.}, {0.08, 0.}, {0.09, 0.}, {0.1, 0.}, {0.11, 0.}, {0.12, 0.}, {0.13, 0.},
{0.14, 0.}, {0.15, 0.}, {0.16, 0.}, {0.17, 0.}, {0.18, 0.}, {0.19, 0.}, {0.2, 0.},
{0.21, 0.}, {0.22, 0.}, {0.23, 0.}, {0.24, 0.}, {0.25, 0.}, {0.26, 0.},
{0.27, 0.}, {0.28, 0.}, {0.29, 0.}, {0.3, 0.}, {0.31, 0.}, {0.32, 0.}, {0.33, 0.},
{0.34, 0.}, {0.35, 0.}, {0.36, 0.}, {0.37, 0.}, {0.38, 0.}, {0.39, 0.}, {0.4, 0.},
{0.41, 0.}, {0.42, 0.}, {0.43, 0.}, {0.44, 0.}, {0.45, 0.}, {0.46, 0.},
{0.47, 0.}, {0.48, 0.}, {0.49, 0.}, {0.5, 0.}, {0.51, 0.}, {0.52, 0.}, {0.53, 0.},
{0.54, 0.}, {0.55, 0.}, {0.56, 0.}, {0.57, 0.}, {0.58, 0.}, {0.59, 0.}, {0.6, 0.},
{0.61, 0.}, {0.62, 0.}, {0.63, 0.}, {0.64, 0.}, {0.65, 0.}, {0.66, 0.},
{0.67, 0.}, {0.68, 0.}, {0.69, 0.}, {0.7, 0.}, {0.71, 0.}, {0.72, 0.}, {0.73, 0.},
{0.74, 0.}, {0.75, 0.}, {0.76, 0.}, {0.77, 0.}, {0.78, 0.}, {0.79, 0.}, {0.8, 0.},
{0.81, 0.}, {0.82, 0.}, {0.83, 0.}, {0.84, 0.}, {0.85, 0.}, {0.86, 0.},
{0.87, 0.}, {0.88, 0.}, {0.89, 0.}, {0.9, 0.}, {0.91, 0.}, {0.92, 0.}, {0.93, 0.},
{0.94, 0.}, {0.95, 0.}, {0.96, 0.}, {0.97, 0.}, {0.98, 0.}, {0.99, 0.}, {1., 0.}}
```

```
In[88]:= ListPlot[ data[[1]], PlotRange -> {0, 0.05}, PlotJoined -> True]
```



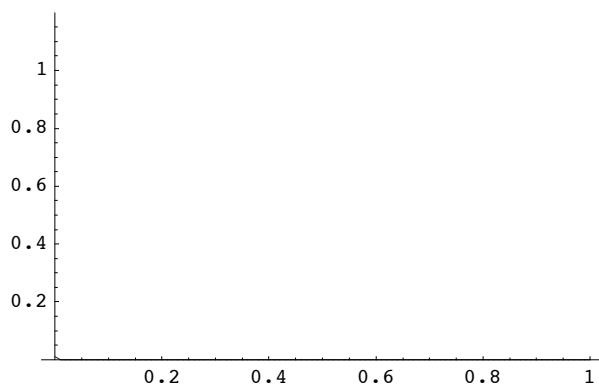
```
Out[88]= - Graphics -
```

```
In[89]:= ListPlot[ Last[data] , PlotRange -> {0, 1.2}, PlotJoined -> True]
```

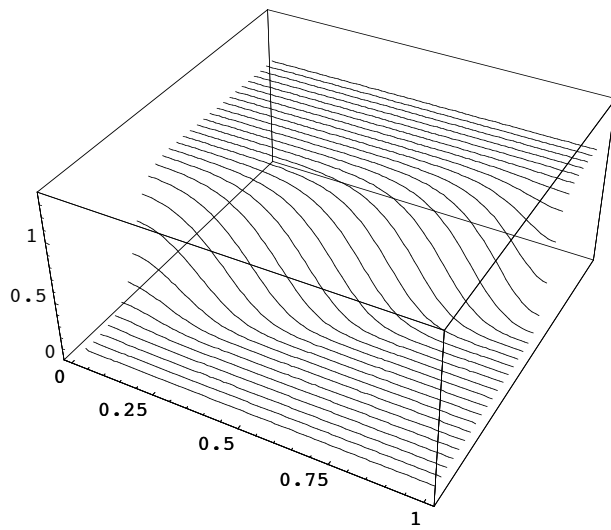


```
Out[89]= - Graphics -
```

```
In[90]:= glist = {};  
Do[  
  g = ListPlot[ data[[i]] , PlotRange -> {0, 1.2}, PlotJoined -> True];  
  AppendTo[glist, g], {i, 1, Length[data], 100}  
]
```

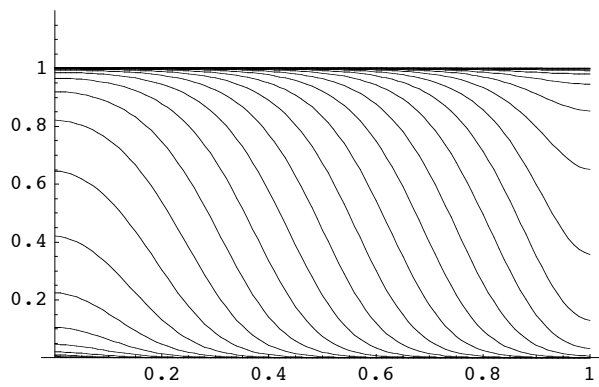


```
In[92]:= Show[StackGraphics[glist], BoxRatios -> {2, 2, 1}, PlotRange -> {0, 1.4}]
```



```
Out[92]= - Graphics3D -
```

```
In[93]:= Show[glist]
```



```
Out[93]= - Graphics -
```