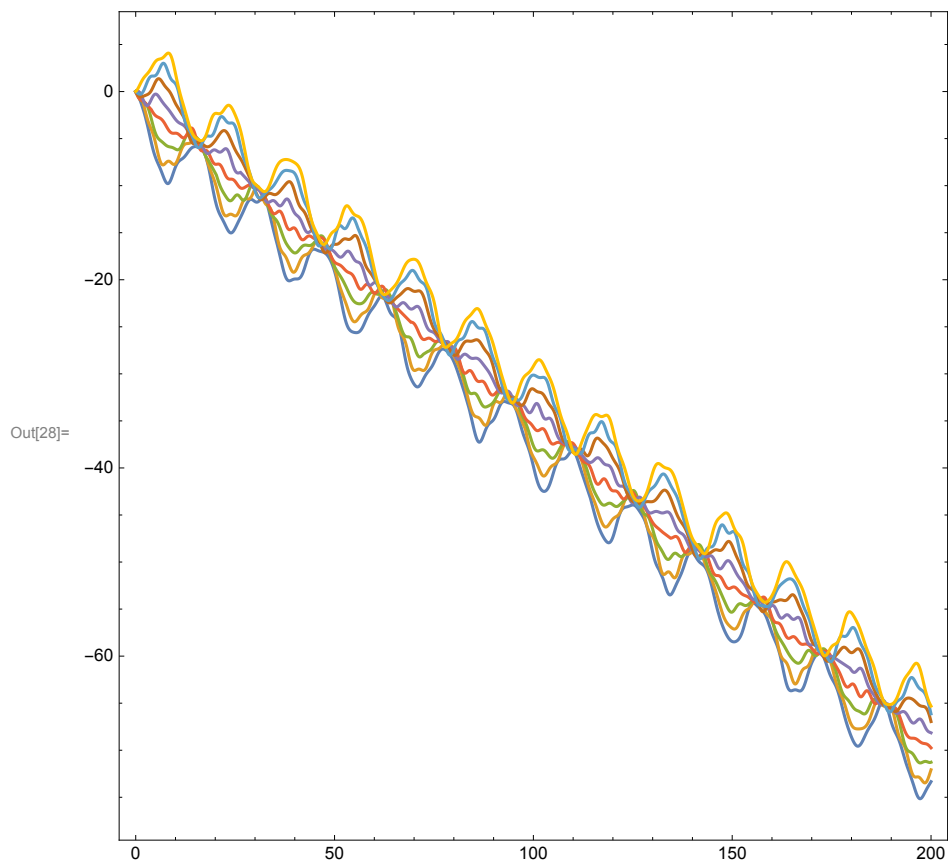


```
In[34]:= m = 1.;  $\alpha$  = 0.0225; n = 32; tf = 200.; p = 2;
```

```
In[35]:=
```

```
nsol = NDSolve[  
  Evaluate@Flatten[{Table[m x[i]''[t] == (x[i + 1][t] - 2 * x[i][t] + x[i - 1][t])  
    (1 +  $\alpha$  * (x[i + 1][t] - x[i - 1][t])), {i, n}] /.  
    {x[0][t] => x[1][t] - 1, x[n+1][t] => x[n][t] + 1},  
    Table[{x[i][0] == RandomReal[{-0.1, 0.1}] / 2, x[i]'[0] == RandomReal[{-1, 1}]},  
      {i, n}]}], Table[x[i], {i, n}], {t, 0, tf}];
```

```
In[28]:= Plot[Evaluate[Table[x[i][t], {i, 1, n}] /. nsol], {t, 0, tf},  
  PlotRange -> All, Frame -> True, Axes -> False,  
  ImageSize -> 450, AspectRatio -> 1]
```



```
In[36]:= Plot[Evaluate[x[6][tt] /. nsol], {tt, 0, tf}]
```

