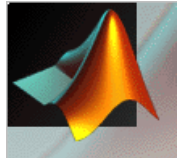


Steife Differentialgleichungen: Beispiel Pendel

Beispiel: Steifes Pendel



see `stiffpen.m`
`plotspen.m`
`solspen.m`

```
function yp = stiffpen ( t, y, d, k ),  
% -> allocate memory for output  
yp = zeros ( size(y) );  
% -> physical parameters  
g    = 9.81;  
len0 = 1.0;  
% -> read vector of unknowns  
alpha = y(1);  
alphap = y(2);  
dlen  = y(3);  
dlenp = y(4);  
% -> evaluate right hand side  
yp(1) = alphap;  
yp(2) = - g/(len0+dlen) * sin(alpha);  
yp(3) = dlenp;  
yp(4) = (len0+dlen)*alphap + ...  
        g*cos(alpha) - d*dlenp - k*dlen;
```

