

```
clear
```

```
  ymin=-4. ; ymax=+4. ;  
  ypmin=-3. ; ypmax=+3. ;
```

```
delta=0.5;
```

```
y=[ymin:delta:ymax];yp=[ypmin:delta:ypmax];
```

```
fy=ones(length(y),1)*yp;
```

```
fyp=-sin(y)'*ones(1,length(yp));
```

```
champ(y,yp,fy,fyp,)
```

```
xtitle('champs de vecteurs pour le pendule theta'''+sin(theta)=0','theta','theta''')
```