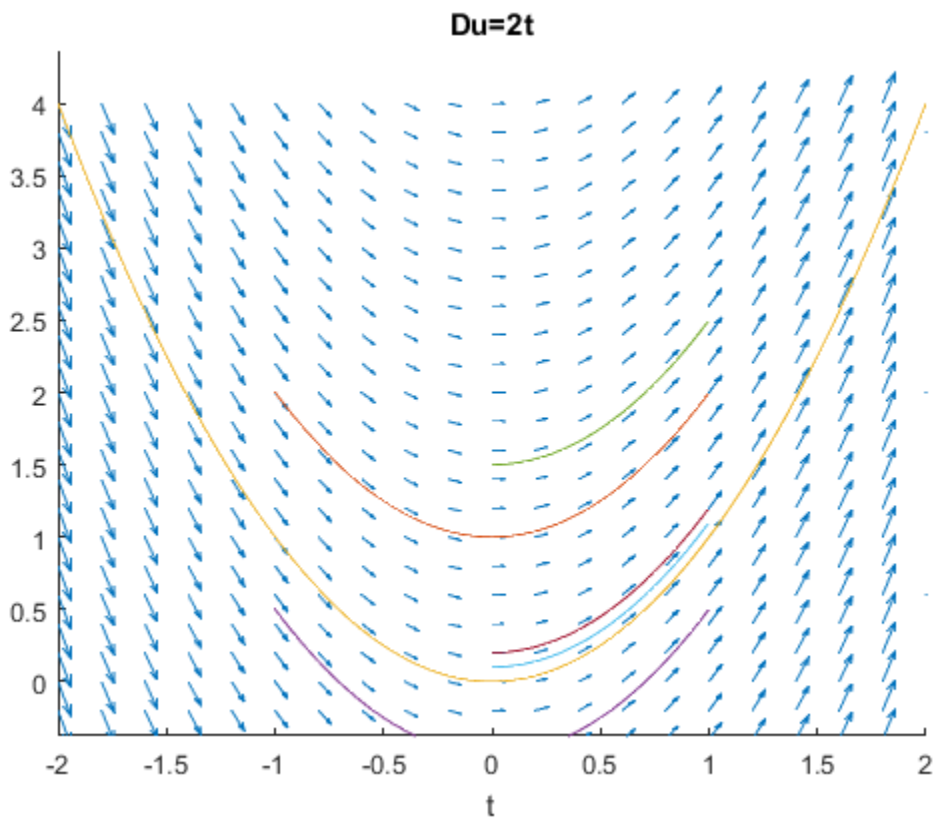# Camp de direccions

```
f=@(t,y)2.*t;
t=-2:0.2:2; y=-4:0.2:4;
[TT,YY] = meshgrid(t,y);
DT=ones(size(TT));
DY=f(TT,YY);
```

PVI

```
u0=dsolve('Du=2*t','u(0)=0');
u1=dsolve('Du=2*t','u(0)=1');
[t5,y5] = ode45(f, [-1,1], 0.5);
[t15,y15] = ode45(f, [0,1], 1.5);
[t1,y1] = ode45(f, [0,1], 0.1);
[t2,y2] = ode45(f, [0,1], 0.2);

figure(5)
hold on
quiver(TT,YY,DT,DY)
ezplot(u1,[-1,1])
ezplot(u0,[-2,2])
plot(t5,y5,t15,y15,t1,y1,t2,y2)
title('Du=2t')
hold off
```

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