

```

II = -2;

a = -1;
c1 = -1;
b = 2;
eps = 0.1;
c0[u_] = -0.5 u - 1.5 c1;
NCw[u_] = b u;

NCu[u_] = II + a u HeavisideTheta[-(u - 0.5)] + a (1 - u) HeavisideTheta[u - 0.5]
          HeavisideTheta[-(u - 1.5)] + (c0[u] + c1 u) HeavisideTheta[u - 1.5];
nullcline1 = Plot[NCu[u], {u, -3, 3}, PlotStyle -> {Red, Thick}];
nullcline2 = Plot[NCw[u], {u, -3, 3}, PlotStyle -> {Green, Thick}];

Du[u_, w_] = NCu[u] - w; (* II already in there *)
Dw[u_, w_] = eps (b u - w);
flow = StreamPlot[{Du[u, w], Dw[u, w]}, {u, -3, 3}, {w, -6, 6}];
(*SetDirectory[ ]
Export["exercice_3.2_I0.jpg", *)
Show[nullcline1, nullcline2, flow]

```