```
j=cbind;l=sum;a=apply
m=l(!!M);n=m^.5
g=function(A,r=M[A])A+c((r<2)*(1-n*(A[,1]==n))-(r==2)*(1-n*(A[,1]<2)),
(r==3)*(1-n*(A[,2]==n))-(r>3)*(1-n*(A[,2]<2)))
I=c()
for(i in d<-1:n)I=rbind(I,j(i*d/d,d))
for(t in b<-1:m)I=g(I)
p=function(i)i[,1]+n*i[,2]-n-1
K=matrix(0,m,m)
for(t in b)K[b+m*p(I<-g(I))]=1
s=o=a(u<-unique(K),1,l)
for(k in 1:l(!!s))s[k]=l(!a(!!sweep(K,2,u[k,],'-'),1,l))
j(o,s-o)…
```