Repaso de Metropolis para Ising

El algoritmo básico:

```
for (i=0;i<N;i++)
  {
    ii = rand()%L;
    jj = rand()%L;
    s = *(red+L*ii+jj);
    s1 = *(red+L*((ii-1)+L)%L)+jj);    s2 = ... ;
    h = 2*[(-s-s)+2]+2+(-s-s)*(s1+s2+s3+s4)/4;
    w = *(tabla+h);
    p = myrand();
    if (p<w) *(red+L*ii+jj) = -s;
  }
```

Control de calidad de la aceptación

```
for (i=0; i<N; i++)
 {
   p = myrand();
   x = trial(x0);
   w = exp(-0.5*(x*x-x0*x0));
   *accept = 0;
   if (p<w)
    {
      x0 = x;
      *accept = 1;
    }
   frac = pa(accept,naccept);
   fprintf(fp,....,x0,frac);
 }
```

Función “pa”

```
double pa(int *accept,int naccept)
 {
   int i;
   double sum,frac;
   i = naccept-1;
   while (i>0)
    {
     *(accept+i) = *(accept+i-1);
     i--;
    }
   *accept = 0;
   sum = 0.0;
   for (i=0;i<naccept;i++) sum += *(accept+i);
   frac = sum/(double)naccept;
   return frac;
 }
```