

```

function H=FILTERideal(A,r)

[Ny,Nx]=size(A);
[x,y]=meshgrid(-Nx/2:Nx/2-1,-Ny/2:Ny/2-1);
R=r*r;
H=(x.^2+y.^2)<=R;

% =====

function M=FILTERgauss(A,si)
NN=size(A);
hx=floor(NN(2)/2) + 1;
hy=floor(NN(1)/2) + 1;
[x,y]=meshgrid(1:1:NN(2),1:1:NN(1));
S=2*si^2;
M=exp(-((x-hx).^2+(y-hy).^2)/S);

% =====

function ha=IPim(A,fig,TXT)
if nargin>1
    figure(fig);
end
if nargin==3
    figure(fig);
    title(TXT);
end

IPgreymap(256);
ha=image(A);
axis image
if nargin==3
    title(TXT,'Fontsize',18);
end

figure(gcf);

% =====

function IPimft(A,fig,TXT)

if nargin<2
    fig=1;
end
if nargin<3
    TXT='';
end

Alog=log(abs(A));
size(Alog)
m=max(Alog(:));
IPim(Alog/m*255,fig,TXT);

```