

The original code in page 2-18 for the EPRY scheme is as follows:

```
1   seq = gseq(arraysize);
2   objectRecover = ones(m,n);
3   objectRecoverFT = fftshift(fft2(objectRecover));
4   loop = 25;pupil=1;
5   for tt=1:loop
6       for i3=1:arraysize^2
7           i2=seq(i3);
8           kxc = round((n+1)/2+kx(1,i2)/dkx);
9           kyc = round((m+1)/2+ky(1,i2)/dky);
10          kyl=round(kyc-(m1-1)/2);kyh=round(kyc+(m1-1)/2);
11          kxl=round(kxc-(n1-1)/2);kxh=round(kxc+(n1-1)/2);
12          lowResFT_1 = (m1/m)^2 *
13                      objectRecoverFT(kyl:kyh,kxl:kxh).*CTF.*pupil;
14          im_lowRes = ifft2(ifftshift(lowResFT_1));
15          im_lowRes = (m/m1)^2 *
16                      imSeqLowRes(:, :, i2).*exp(1i.*angle(im_lowRes));
17          lowResFT_2 = fftshift(fft2(im_lowRes)).*CTF.*(1./pupil);
18          objectRecoverFT(kyl:kyh,kxl:kxh) = objectRecoverFT(kyl:kyh,kxl:kxh)
19              + conj(pupil)./(max(max(abs(pupil).^2)))
20                  .*(lowResFT_2 - lowResFT_1);
21          pupil = pupil + conj(objectRecoverFT(kyl:kyh,kxl:kxh))
22              ./ (max(max(abs(objectRecoverFT(kyl:kyh,kxl:kxh)).^2)))
23              .*(lowResFT_2 - lowResFT_1);
24      end;
25  end;
26  objectRecover=ifft2(ifftshift(objectRecoverFT));
27  imshow(abs(objectRecover), []);
28  figure;imshow(angle(objectRecover), []);
29  figure;imshow(log(objectRecoverFT), []);
```

It should be corrected to:

```
1   seq = gseq(arraysize);
2   objectRecover = ones(m,n);
3   objectRecoverFT = fftshift(fft2(objectRecover));
4   loop = 25;pupil=1;
5   for tt=1:loop
6       for i3=1:arraysize^2
7           i2=seq(i3);
8           kxc = round((n+1)/2+kx(1,i2)/dkx);
9           kyc = round((m+1)/2+ky(1,i2)/dky);
10          kyl=round(kyc-(m1-1)/2);kyh=round(kyc+(m1-1)/2);
11          kxl=round(kxc-(n1-1)/2);kxh=round(kxc+(n1-1)/2);
12          lowResFT_1 = objectRecoverFT(kyl:kyh,kxl:kxh).*CTF.*pupil;
13          im_lowRes = ifft2(ifftshift(lowResFT_1));
14          im_lowRes = (m/m1)^2 *
15                      imSeqLowRes(:, :, i2).*exp(1i.*angle(im_lowRes));
16          lowResFT_2 = fftshift(fft2(im_lowRes));
17          objectRecoverFT(kyl:kyh,kxl:kxh) = objectRecoverFT(kyl:kyh,kxl:kxh)
18              + conj(CTF.*pupil)./(max(max(abs(CTF.*pupil).^2)))
19                  .*(lowResFT_2 - lowResFT_1);
20          pupil = pupil + conj(objectRecoverFT(kyl:kyh,kxl:kxh))
21              ./ (max(max(abs(objectRecoverFT(kyl:kyh,kxl:kxh)).^2)))
22              .*(lowResFT_2 - lowResFT_1);
23      end;
24  end;
```