Table of Contents

Reader cylindrical coordinate 2D

```
clear all

A0 = importdata('out0.txt');
A1 = importdata('out1.txt');
A2 = importdata('out2.txt');
A3 = importdata('out3.txt');
A4 = importdata('out4.txt');
A5 = importdata('out5.txt');
A6 = importdata('out6.txt');
```

Grid parameters

```
nr = 250; %A3(1);
nz = 400; %A3(2);


snap  = length(A3)/nr/nz;%1;%
Nsnap = snap-1;%floor(Ntime/snap);

r = A0(1:nr);
z = A0(nr+1:nz+nr);

[Z R] = meshgrid(z,r);

dt = 0.05;

t     = A5(:,1);
Exuv  = A5(:,2);
ksnap = floor(length(t)/snap);
```

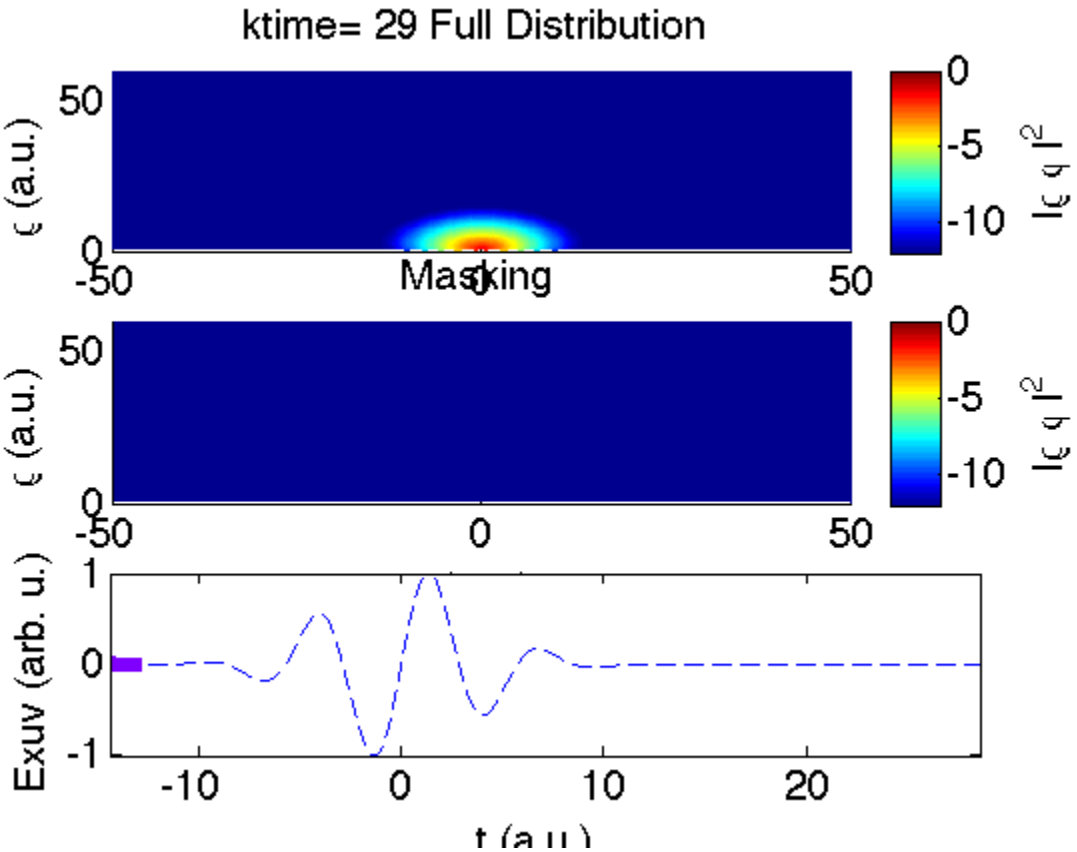
Movie time interaction

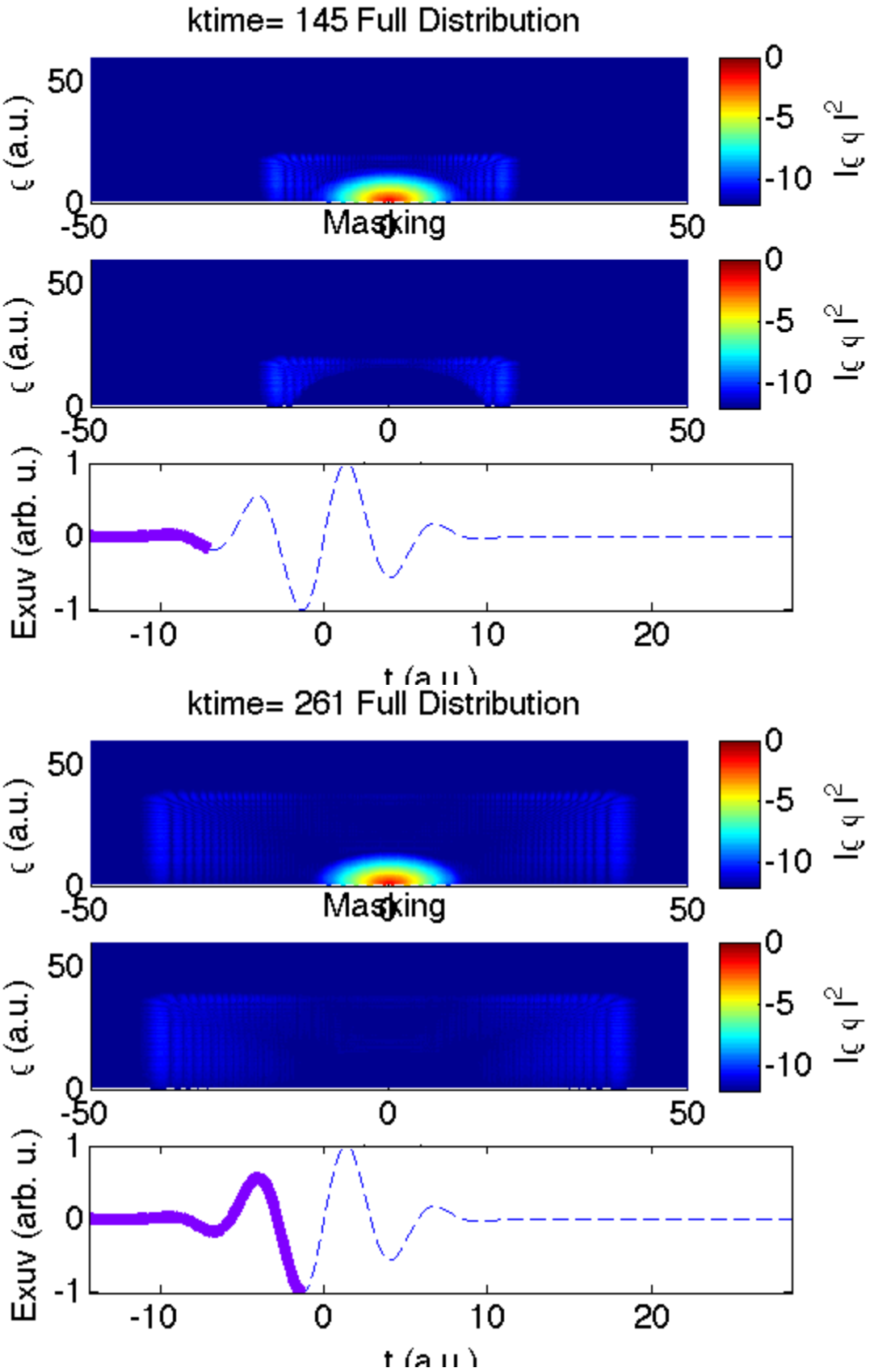
aviobj = avifile('EWP.avi'); scrsz = get(0,'ScreenSize'); fig=figure('Position',[1 scrsz(4) scrsz(3)*0.5 scrsz(4)*0.8],... 'Color','w');

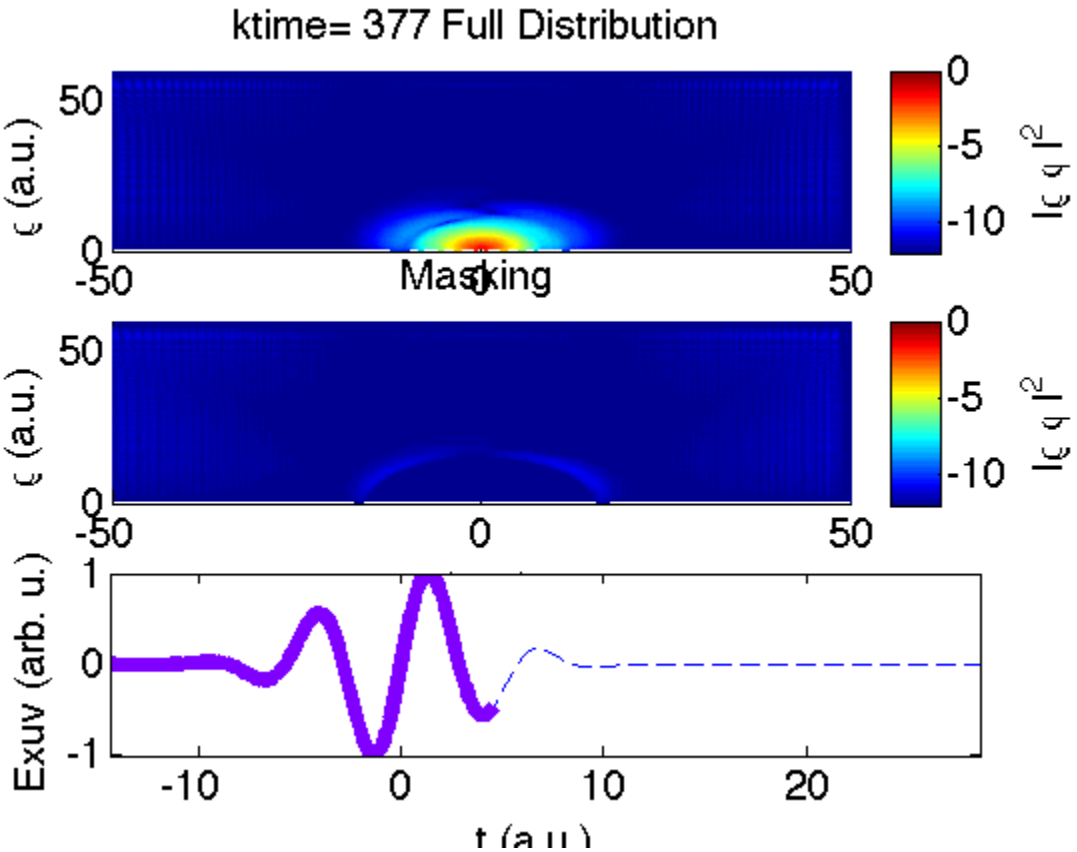
```
xmin = -50;
xmax =  50;
ymin =  0;
ymax =  60;


for j=1:4:Nsnap+2
    %clf

    figure
```

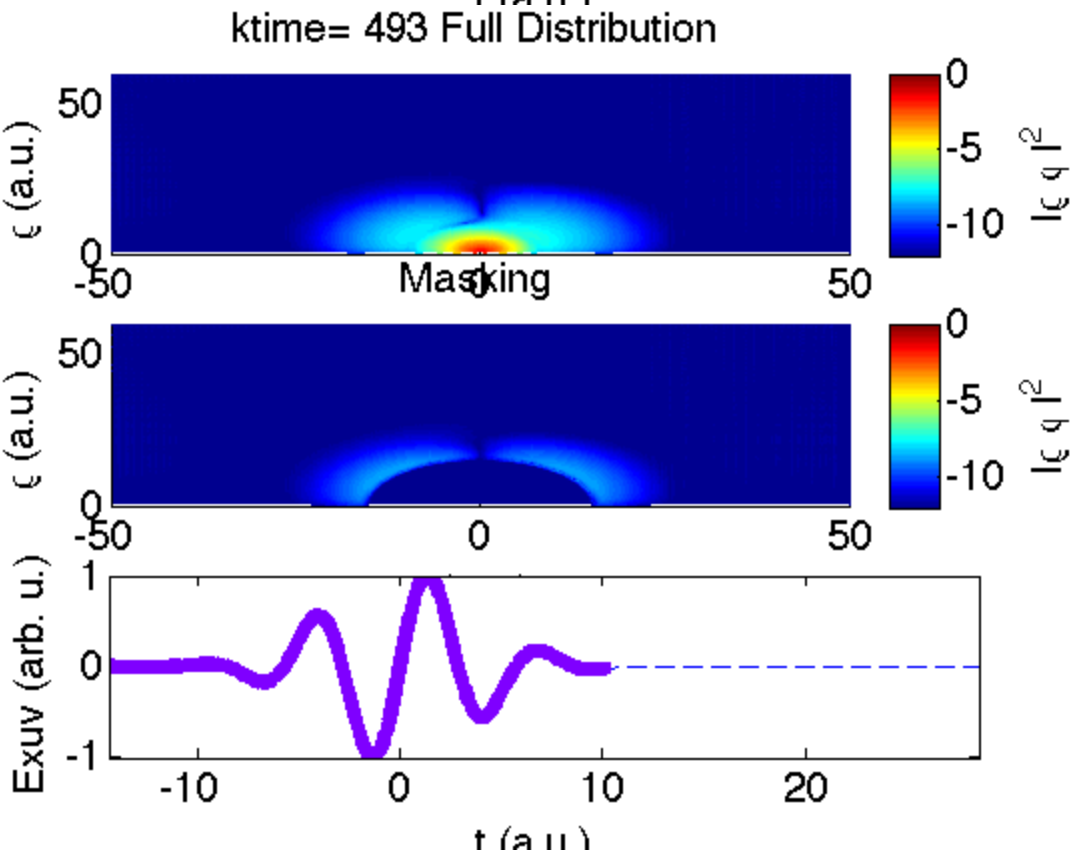
```
PHI  = reshape(A3(1+nr*nz*(j-1):nr*nz*j),nz,nr);
PHI_Mask  = reshape(A6(1+nr*nz*(j-1):nr*nz*j),nz,nr);


subplot(3,4,[1 2 3 4] )
surfc(Z,R,log10(PHI'+1e-12),...
    'FaceColor','interp',...
    'EdgeColor','none')

view(2)
axis tight

h=gca;
set(h,'fontsize',16)

%xlabel('z (a.u.) ','fontsize',16)%,'fontweight','b')
ylabel('\rho (a.u.) ','fontsize',16)%,'fontweight','b')



title(['ktime= ',num2str(ksnap*j),' Full Distribution ' ],'fontsize',16)
h = colorbar('location','EastOutside');
set(get(h,'YLabel'),'String',' |\rho \phi |^2  ',...
    'fontsize',16)%,'fontweight','b');

caxis([-12 0])

xlim([xmin xmax])
ylim([ymin ymax])

h=gca;
set(h,'fontsize',16)



subplot(3,4,[5 6 7 8])
surfc(Z,R,log10(PHI_Mask'+1e-12),...
    'FaceColor','interp',...
    'EdgeColor','none')

view(2)
axis tight

h=gca;
set(h,'fontsize',16)

xlabel('z (a.u.) ','fontsize',16)%,'fontweight','b')
ylabel('\rho (a.u.) ','fontsize',16)%,'fontweight','b')



title('Masking ','fontsize',16)
h = colorbar('location','EastOutside');
set(get(h,'YLabel'),'String',' |\rho \phi |^2  ',...
    'fontsize',16)%,'fontweight','b');

caxis([-12 0])

xlim([xmin xmax])
ylim([ymin ymax])
```

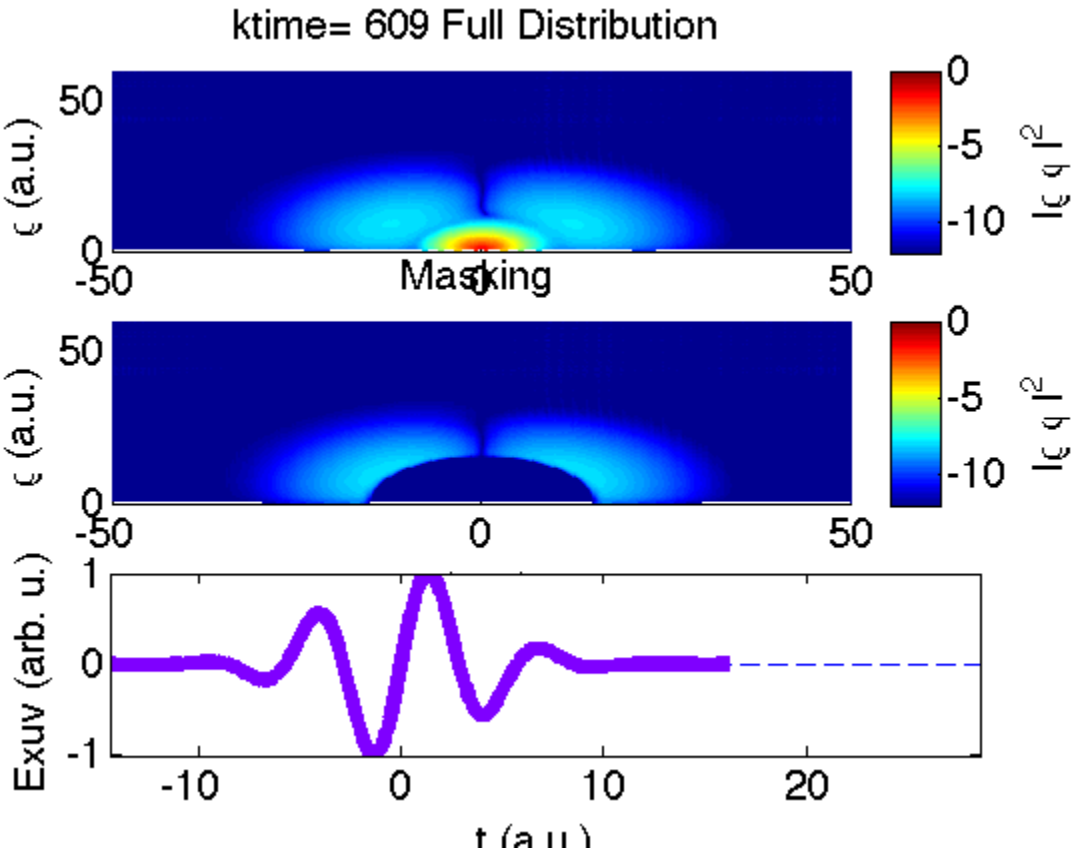
```
    h=gca;
    set(h,'fontsize',16)


    subplot(3,4,[ 9 10 11 12])
    plot(t,Exuv/max(Exuv),'--b','linewidth',1)
    hold on
    plot(t(1:ksnap*j+1) ,Exuv(1:ksnap*j+1)/max(Exuv),'Color',[0.5 0 1],'linewidth'


    xlabel('t (a.u.) ','fontsize',16)%
    ylabel('Exuv (arb. u.) ','fontsize',16)%


    h=gca;
    set(h,'fontsize',16)
    axis tight
    %F = getframe(fig);
    %aviobj = addframe(aviobj,F);

    pause(0.01)

end

% aviobj = close(aviobj);
% close(fig)
```

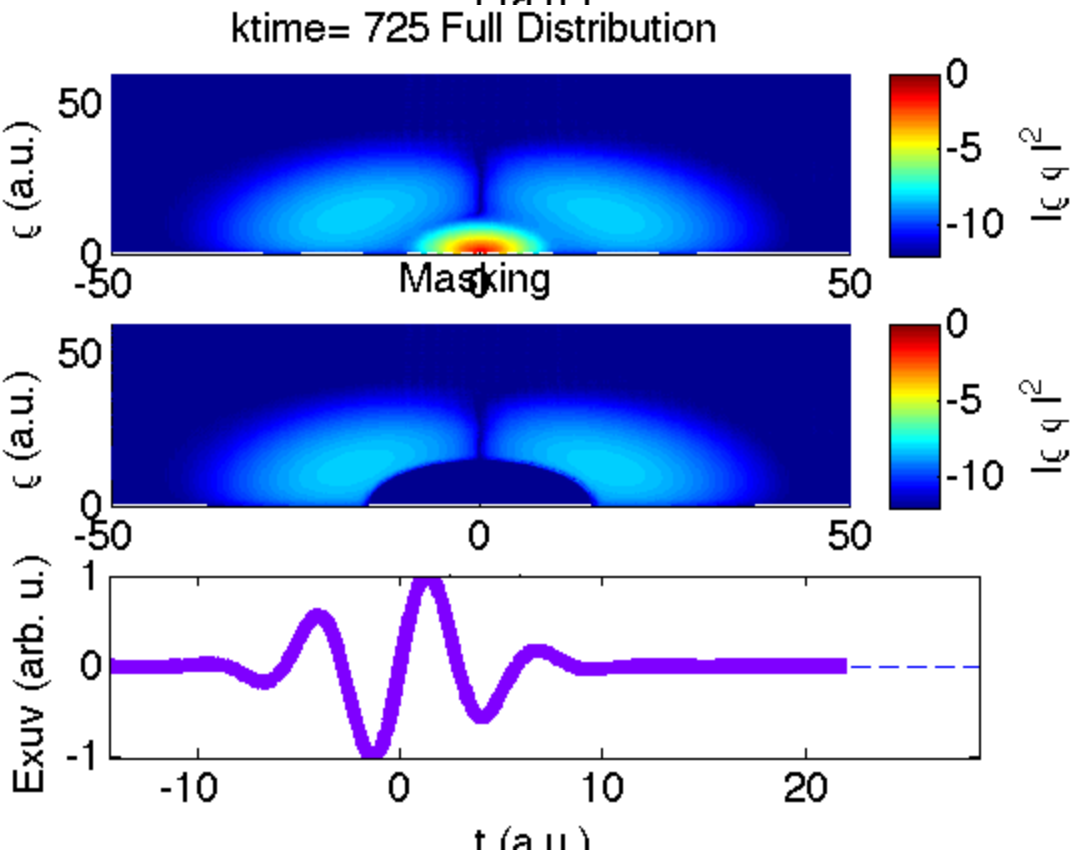


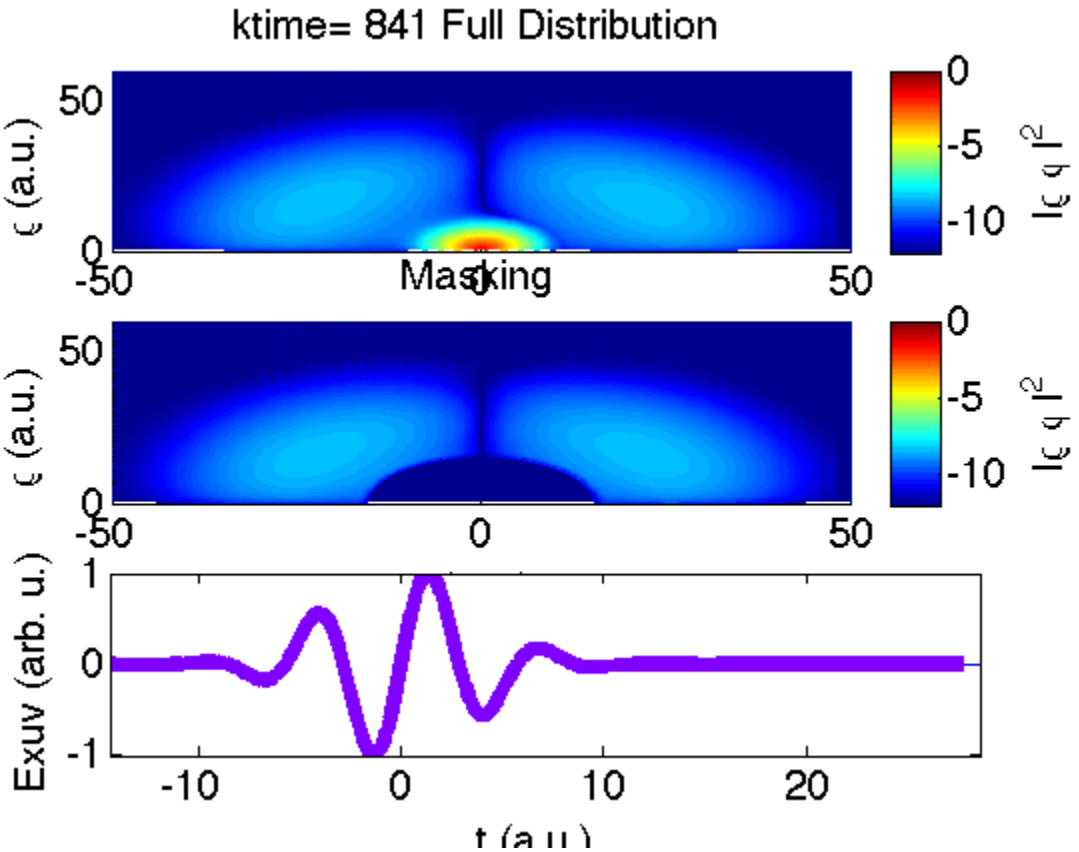

ktime= 145 Full Distribution
ϵ (a.u.)
50
0
-50
Masking
50
0
-5
-10
|ξ(ϵ,t)|²
ϵ (a.u.)
50
0
-50
0
50
0
-5
-10
|ξ(ϵ,t)|²
Exuv (arb. u.)
1
0
-1
-10
0
10
20
t (a.u.)
ktime= 261 Full Distribution
ϵ (a.u.)
50
0
-50
Masking
50
0
-5
-10
|ξ(ϵ,t)|²
ϵ (a.u.)
50
0
-50
0
50
0
-5
-10
|ξ(ϵ,t)|²
Exuv (arb. u.)
1
0
-1
-10
0
10
20
t (a.u.)


ktime= 377 Full Distribution
50
0
-50
Masking
50
ϵ (a.u.)
0
-5
-10
$|\psi|^2$
50
0
-50
0
50
ϵ (a.u.)
0
-5
-10
$|\psi|^2$
1
0
-1
Exuv (arb. u.)
-10
0
10
20
t (a.u.)


ktime= 493 Full Distribution
50
0
-50
Masking
50
ϵ (a.u.)
0
-5
-10
$|\psi|^2$
50
0
-50
0
50
ϵ (a.u.)
0
-5
-10
$|\psi|^2$
1
0
-1
Exuv (arb. u.)
-10
0
10
20
t (a.u.)


ktime= 609 Full Distribution
50
0
-50
ϵ (a.u.)
Masking
50
0
-50
ϵ (a.u.)
0
-5
-10
$|\zeta_q|^2$
1
0
-1
Exuv (arb. u.)
-10
0
10
20
t (a.u.)


ktime= 725 Full Distribution
50
0
-50
ϵ (a.u.)
Masking
50
0
-50
ϵ (a.u.)
0
-5
-10
$|\zeta_q|^2$
1
0
-1
Exuv (arb. u.)
-10
0
10
20
t (a.u.)



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