```
lam=0.06
dec=0
wE=7.3*10^(-5)
nant=2
nosec=0
Array[x,nant]
Array[y,nant]
Array[bl,{nant,nant}]
Array[cosg,{nant,nant}]
Array[sing,{nant,nant}]
Array[u[t_],{nant,nant}]
Array[v[t_],{nant,nant}]
Array[uv,nant]
x[1]=0
y[1]=0
x[2]=1
y[2]=0
bl[i_,j_]:=((y[i]-y[j])^2+(x[i]-x[j])^2)^0.5
cosg[i_,j_]:=(x[i]-x[j])/bl[i,j]
sing[i_,j_]:=(y[i]-y[j])/bl[i,j]
Table[bl[i,j],{i,1,nant},{j,1,nant}]
Table[cosg[i,i]=0,{i,1,nant}]
Table[sing[i,i]=0,{i,1,nant}]
u[t_][i_,j_]:=(bl[i,j]/lam)cosg[i,j]Cos[-wE*t]
v[t_][i_,j_]:=(bl[i,j]/lam)(Sin[dec] *Sin[-
wE*t]+sing[i,j]Cos[dec])
Table[u[t][i,j],{i,1,nant-1},{j,i+1,nant}]
Table[v[t],{i,1,nant-1},{j,i+1,nant}]
Table[u[t][i,i]=0,{i,1,nant}]
Table[v[t][i,i]=0,{i,1,nant}]
Do[u[t][j,i]=-u[t][i,j],{i,1,nant-1},{j,i+1,nant}]
Do[v[t][j,i]=-v[t][i,j],{i,1,nant-1},{j,i+1,nant}]
Do[uv[nant*(i-1)+j]={u[t][i,j],v[t][i,j]},{i,1,nant},{j,1,nant}]
alltracks={uv[1]}
Do[AppendTo[alltracks,uv[k]],{k,2,nant*nant}]
ParametricPlot[alltracks,{t,-nosec/2,nosec/2},PlotRange->Full,
 AxesLabel->{"u (wavelengths)","v (wavelengths)"},
 PlotStyle->{{Black,Thickness[0.01]}},AxesStyle->Directive[Thickness[0.01]],
 LabelStyle->{Medium,Directive[Bold]},AspectRatio->Automatic]
```