Ambiguity waveform:

```
lfmwaveform =
  phased.LinearFMWaveform('SampleRate',4,'SweepBandwidth',1,'PRF',1,'PulseWidth',
  0.25);

release(lfmwaveform);

lfmwaveform.NumPulses = 4;

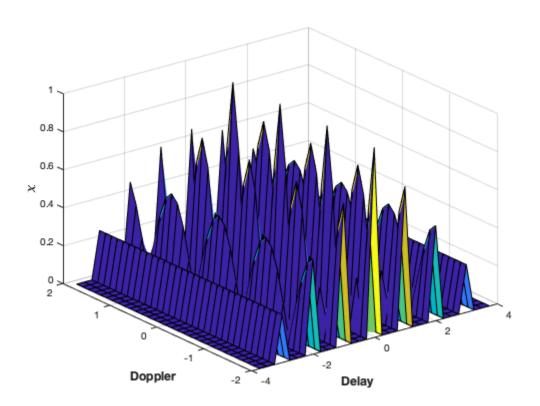
wav = lfmwaveform();

[afmag,delay,doppler] =
  ambgfun(wav,lfmwaveform.SampleRate,lfmwaveform.PRF);

%ambgfun(wav,lfmwaveform.SampleRate,lfmwaveform.PRF);

surf(delay, doppler, (afmag));

xlabel('Delay', 'FontSize', 12, 'FontWeight', 'bold');
ylabel('Doppler', 'FontSize', 12, 'FontWeight', 'bold');
zlabel('\chi', 'FontSize', 12, 'FontWeight', 'bold');
```



(Zero delay response: Doppler cut)

```
lfmwaveform =
  phased.LinearFMWaveform('SampleRate',4,'SweepBandwidth',1,'PRF',1,'PulseWidth',
  0.25);

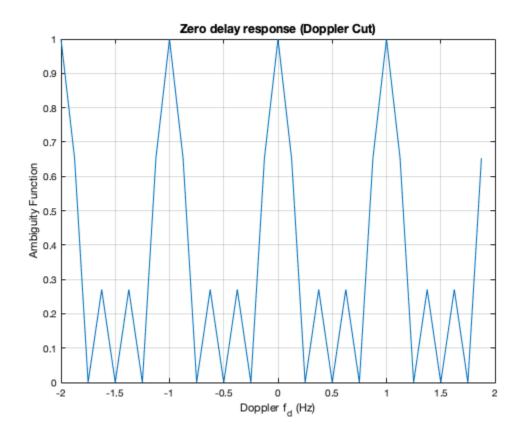
release(lfmwaveform);

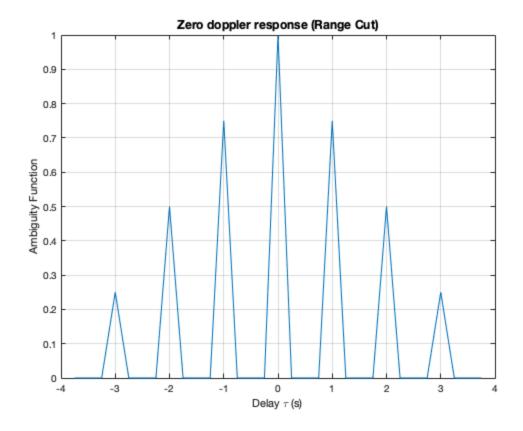
lfmwaveform.NumPulses = 4;

wav = lfmwaveform();

figure(1);
  ambgfun(wav,lfmwaveform.SampleRate,lfmwaveform.PRF, 'Cut', 'Delay');
  title('Zero delay response (Doppler Cut)', 'FontSize',
  12, 'FontWeight', 'bold')

figure(2);
  ambgfun(wav,lfmwaveform.SampleRate,lfmwaveform.PRF, 'Cut', 'Doppler');
  title('Zero doppler response (Range Cut)', 'FontSize',
  12, 'FontWeight', 'bold');
```





Published with MATLAB® R2018a