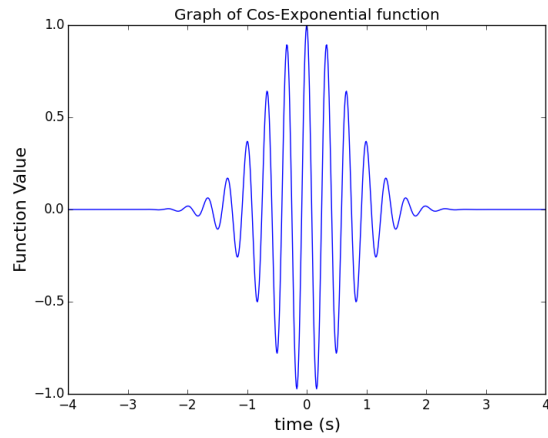


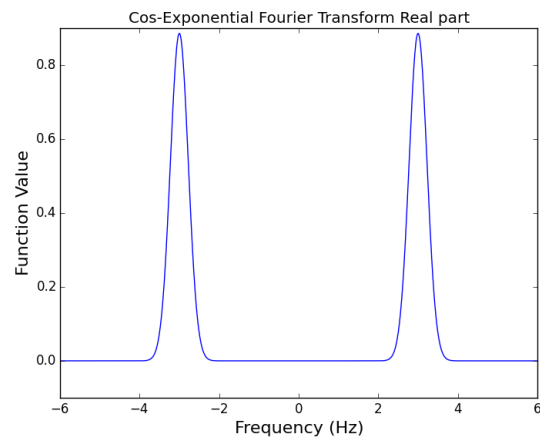
# Lesson 20: Fourier Analysis

Colt Bradley

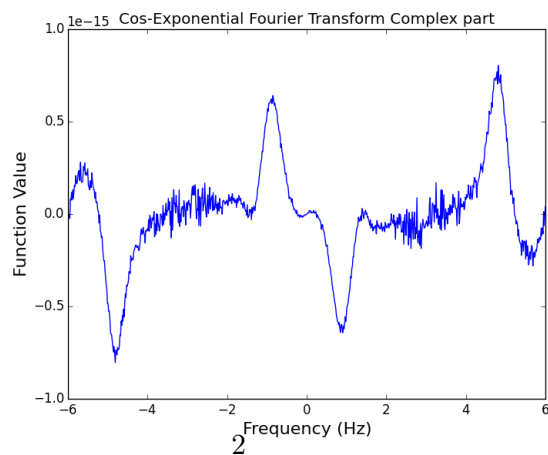
- 1 Part 1**
- 2 Part 2**
- 3 Part 3**
- 4 Codes**



(a)  $a(t)$  vs time

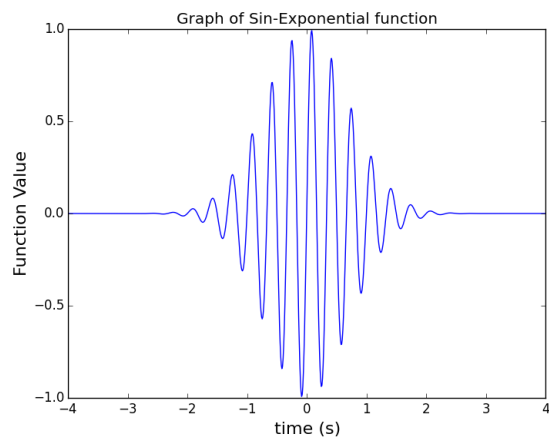


(b) Real part of  $A(f)$  vs frequency

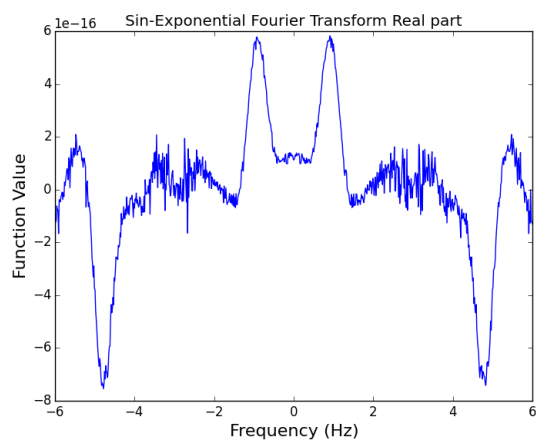


(c) Complex part of  $A(f)$  vs frequency

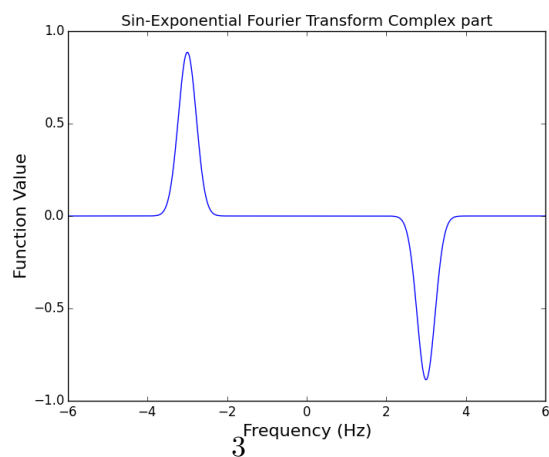
Figure 1: Various plots for  $\cos(6\pi t)e^{-t^2}$



(a)  $a(t)$  vs time

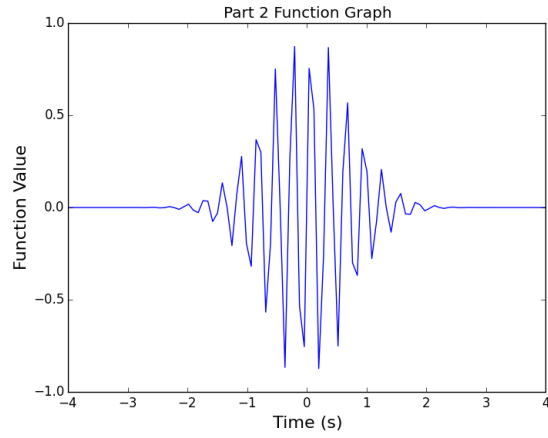


(b) Real part of  $A(f)$  vs frequency

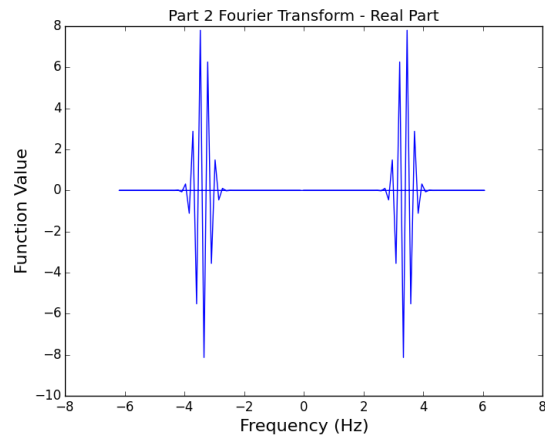


(c) Complex part of  $A(f)$  vs frequency

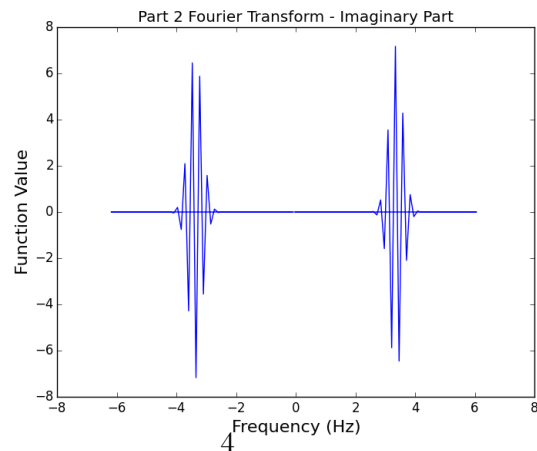
Figure 2: Various plots for  $\sin(6\pi t)e^{-t^2}$



(a)  $a(t)$  vs time



(b) Real part of  $A(f)$  vs frequency



(c) Complex part of  $A(f)$  vs frequency

Figure 3: Various plots for  $\cos(6\pi f_0 t)e^{-t^2}$