AGENDA   3315 APRIL 18, 2022

1. **Review HW 5**
   1_CENG3315_HW5_Answers_Scan_4_17_2022.pdf
2. **FFT Videos**

2a. 3 Applications of the (Fast) Fourier Transform **12:31**
"the most important numerical algorithm of our lifetime"

https://www.youtube.com/watch?v=aqa6vyGSdos

Applications of the (Fast) Fourier Transform (ft. Michael Kapralov)
69,081 views Mar 30, 2017 12:31

JPEG/MP3 GPS CNN MRI Our Ears and Brains

2b. Happy Holidays: Keysight   5:03

Fast Fourier Transforms with an Oscilloscope (FFT) - Scopes University - (S1E8)

https://www.youtube.com/watch?v=u--OsHMGMYc

Consider a $135k vector scope for cable analysis.

2c_ FFT Calculator

https://engineering.icalculator.info/discrete-fourier-transform-calculator.html

ⓘDiscrete Fourier Transform Calculator

Enter series values, seperated by commas, into the discrete fourier transform calculator to calculated the related values for each series figure enetred.

ⓘ Discrete Fourier Transform Calculator

Enter series values	1,1,0,0

[Print] [Email]

ⓘ Discrete Fourier Transform Calculator Results

Sr.No	a_i	Result
1	1	2 + 0j
2	1	1 - 1j
3	0	0 + 0j
4	0	1 + 1j

3. **Data Acquisition Systems   SLIDE SHOW**

   3_DataAcquisition_4_18_2022.pdf

4. **TLH CHAPTER 11 Examples 11-xx**

FFT Tutorial TI

598,640 views •May 17, 2012   6:29

Tony and Ian from Tektronix present a FFT Tutorial (Fast Fourier Transform) covering what is FFT, an explanation of the FFT function as well as different FFT applications. They explain how the FFT works with a FFT example and show an oscilloscope demo to demonstrate how helpful the FFT can be.