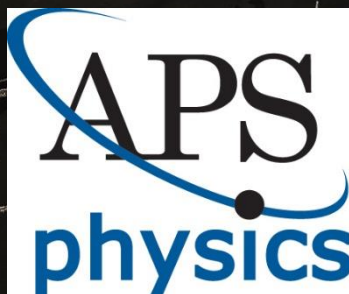
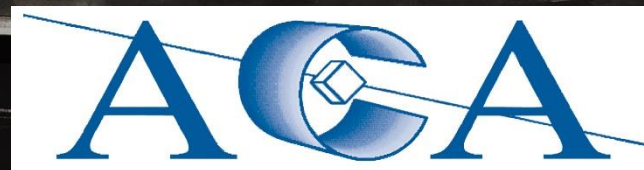
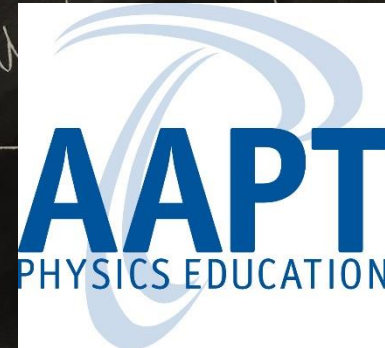




# Closing Ceremony & Reception June 7, 2017

# Member Societies



# US Physics Team Sponsors

**Beloit**

The logo for DE Shaw & Co features a green line graph with an upward trend, positioned above the company name in a serif font.

DE Shaw & Co

The crest of Cambridge University Press, featuring a shield divided into four quadrants, each containing a lion passant guardant.

**CAMBRIDGE**  
UNIVERSITY PRESS

The logo for Ellington Management Group, featuring a stylized diamond shape composed of four smaller diamonds, followed by the company name in a serif font.

**Ellington**  
Management Group

**PEARSON**

The logo for Princeton University Press, featuring a large, stylized letter 'P'.

PRINCETON  
UNIVERSITY  
PRESS

The logo of the University of Maryland, featuring a shield with a yellow and red checkered pattern and a black and white diagonal pattern.

UNIVERSITY OF  
MARYLAND

The logo for Texas Instruments, featuring a stylized outline of the state of Texas with a circuit board pattern inside.

**TEXAS**  
INSTRUMENTS

The logo for Wiley, featuring a stylized 'W' inside a circle.

**WILEY**

# Reception Sponsors



**GEPETTO CATERING**

# Physics Team Coaches



Paul Stanley – Director

Jiajia Dong – Senior Coach

Mark Eichenlaub – Coach

Dave Fallest – Senior Coach

Mike Winer - Coach

Kevin Zhou - Coach



# 2017 U.S. Physics Team



# Physics Team Members



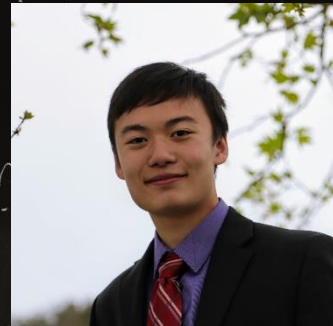
Shreyas Balaji



Mike Bao



Edward Cen



Phil Chen

# Physics Team Members



Matthew Guo



Tiffany Huang



Kiran Linsuain



Steven Liu

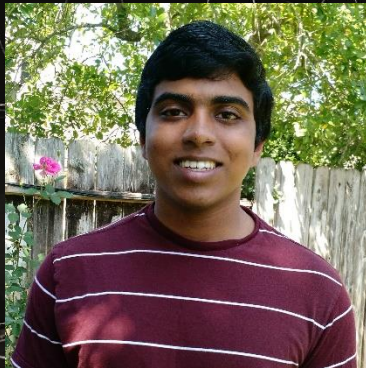
# Physics Team Members



Faraz Masroor



Srijon Mujherjee



Pranav Murugan



Anthony Ou

# Physics Team Members



Aditya Parulekar



Jimmy Qin



Sanjay Raman



Kye Shi

# Physics Team Members



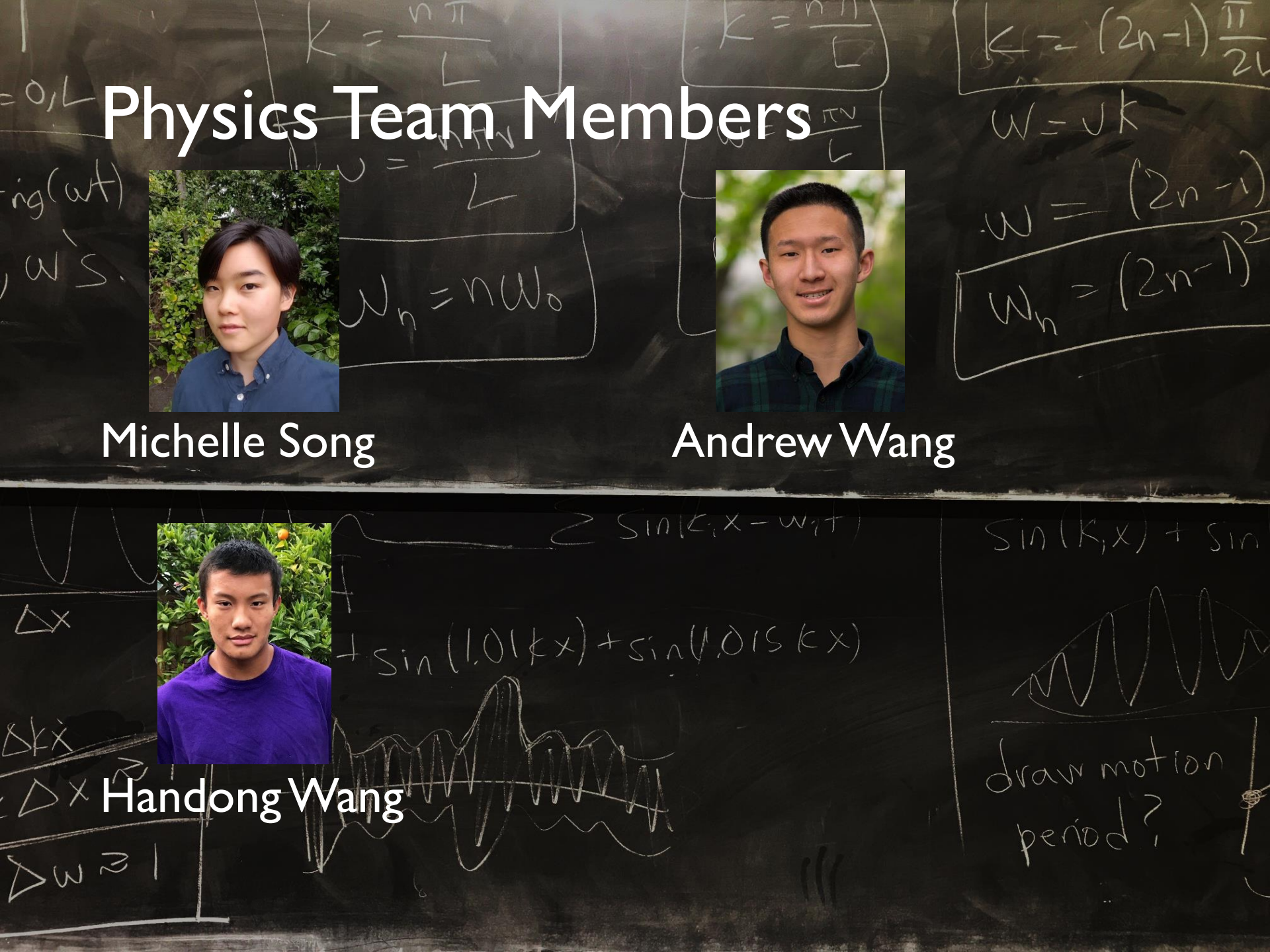
Michelle Song



Andrew Wang



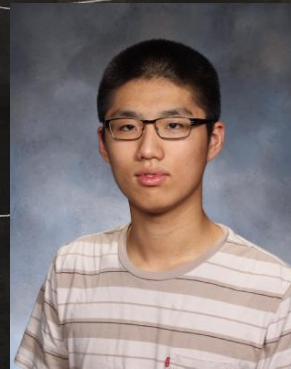
Handong Wang



# Physics Team Members



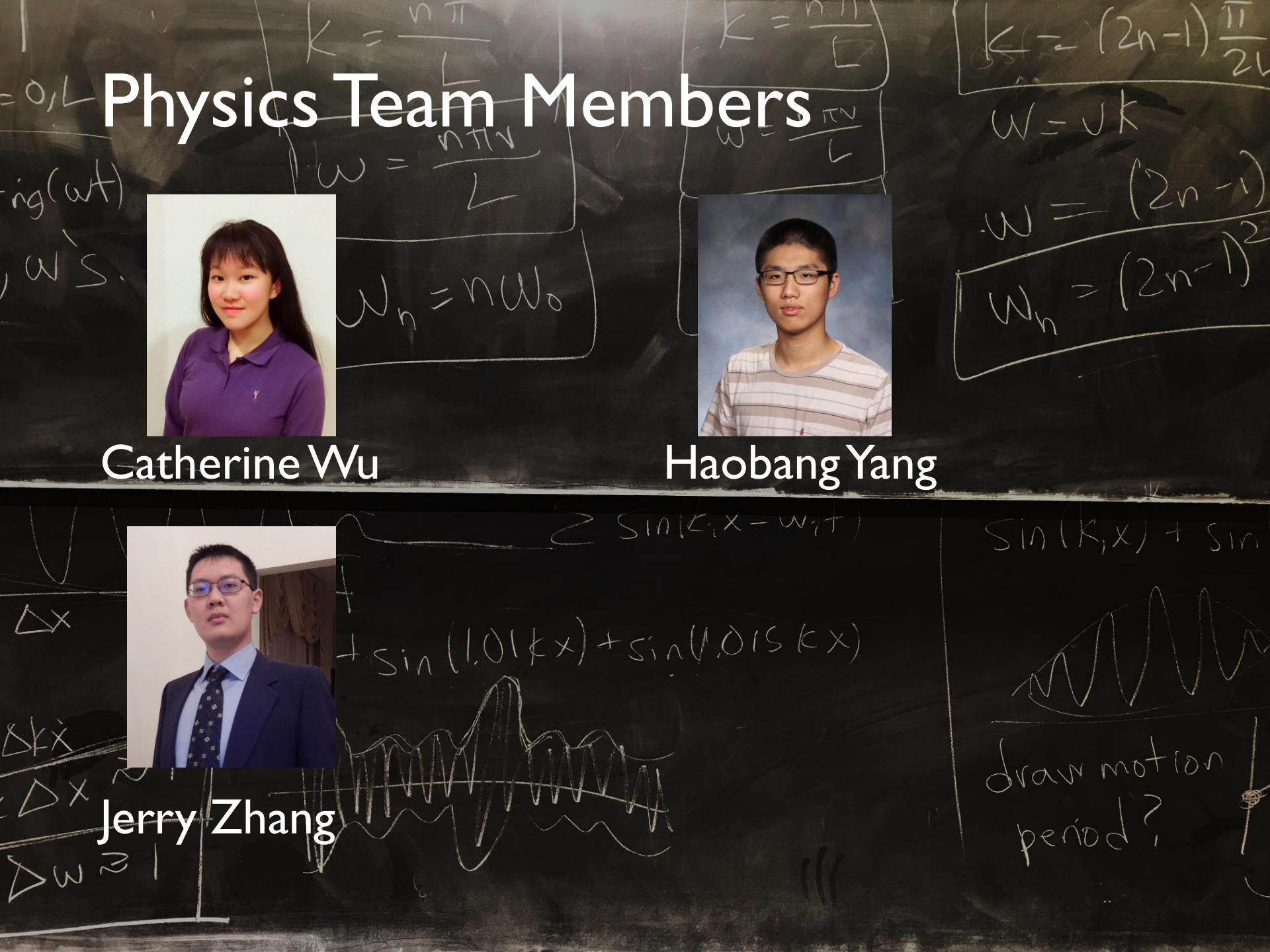
Catherine Wu



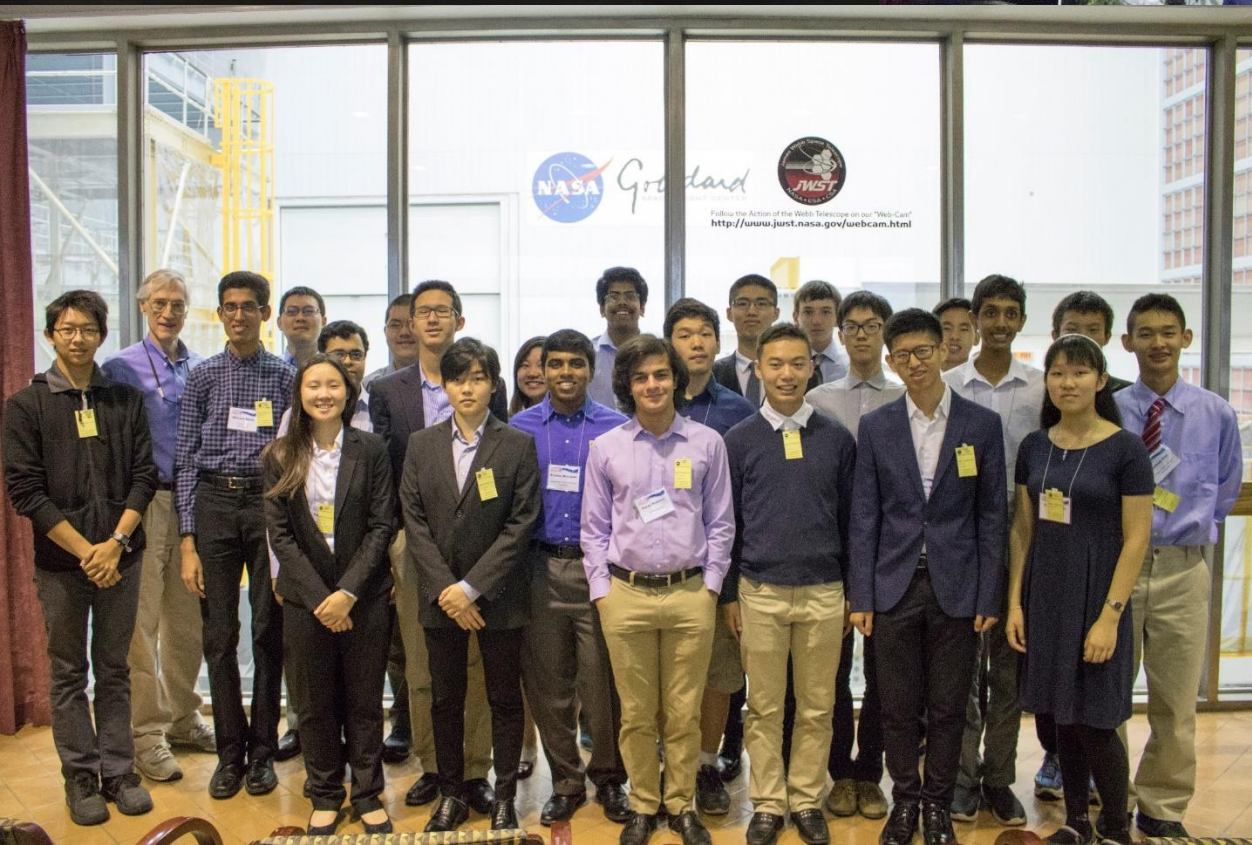
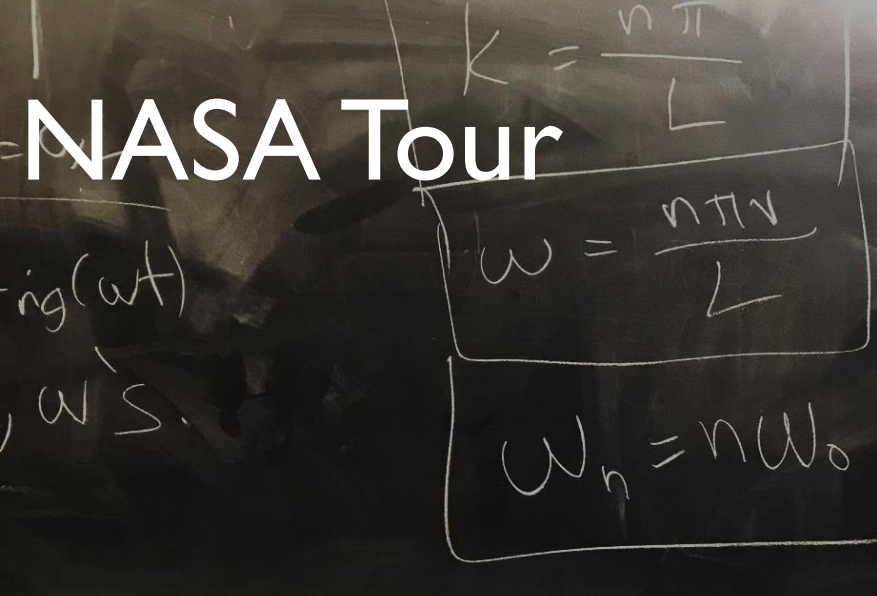
Haobang Yang

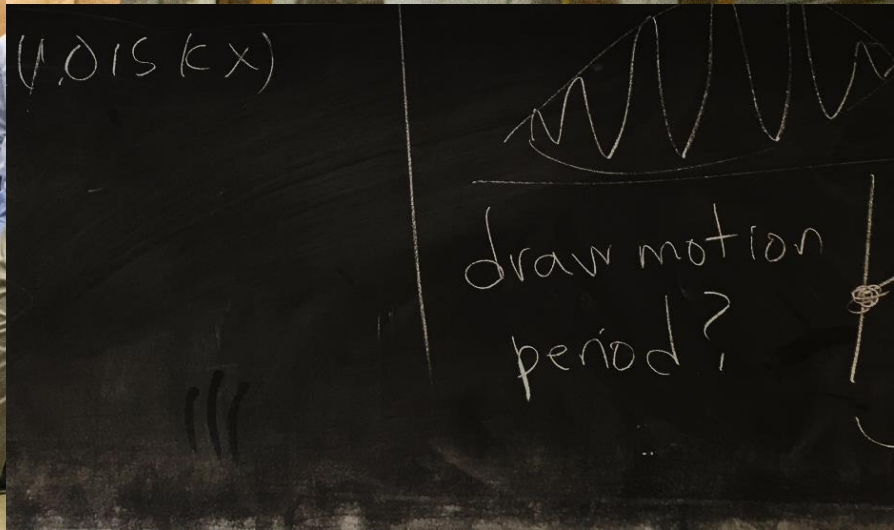
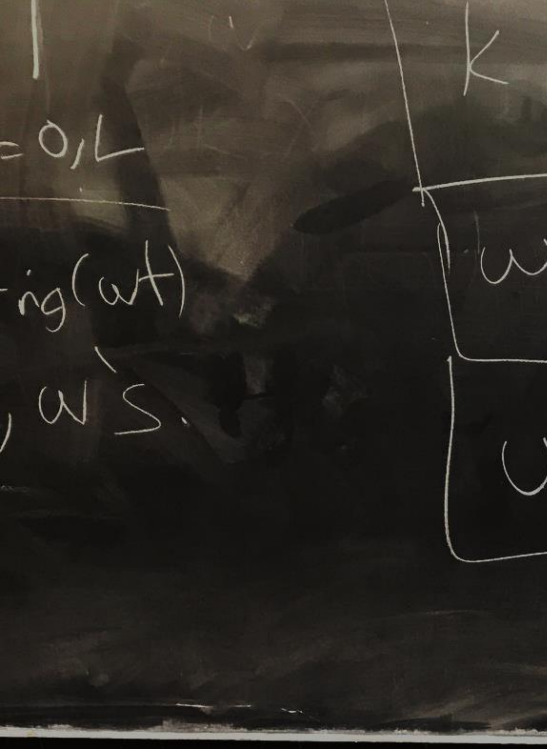


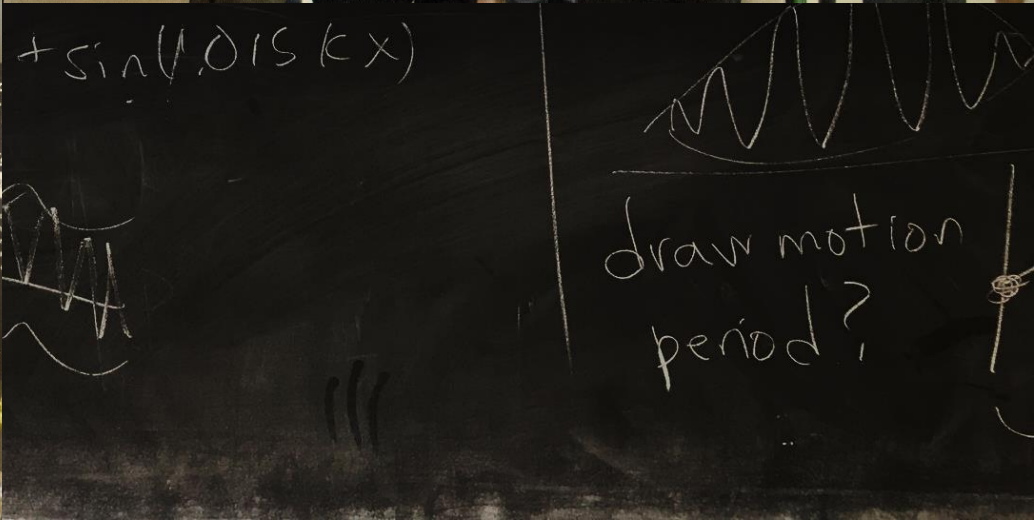
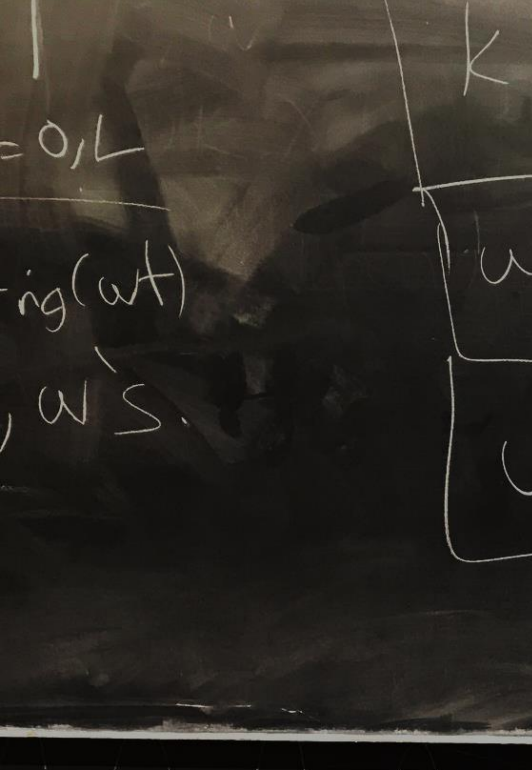
Jerry Zhang



# NASA Tour









$$\left[ \begin{array}{l} \frac{n\pi}{L} \\ \frac{n\pi}{L} \\ nW_0 \end{array} \right] \quad \left[ \begin{array}{l} k = (2n-1)\frac{\pi}{2L} \\ W = vk \\ W = \frac{(2n-1)}{(2n-1)^2} \\ W_n = (2n-1)^2 \end{array} \right]$$

$$\Delta x$$

$$\sin(kx) + \sin(1.01kx) + \sin(1.02kx)$$

$$\Delta kx$$

$$\Delta x \approx 1$$

$$\Delta \omega \approx 1$$



# Opening Reception





$$\begin{aligned} &= \frac{n \pi}{L} \\ &= \frac{n \pi v}{L} \\ &= n \omega_0 \end{aligned} \quad \begin{aligned} &K = (2n-1) \frac{\pi}{2L} \\ &W = vK \\ &W = \frac{(2n-1)^2}{(2n-1)^2} \end{aligned}$$

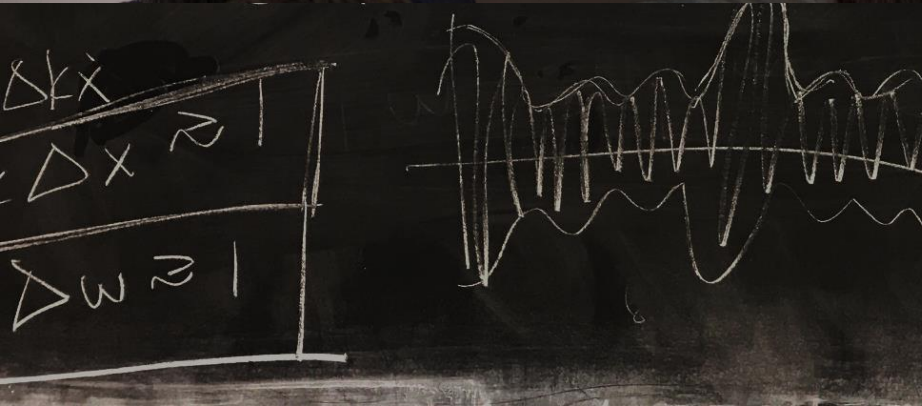
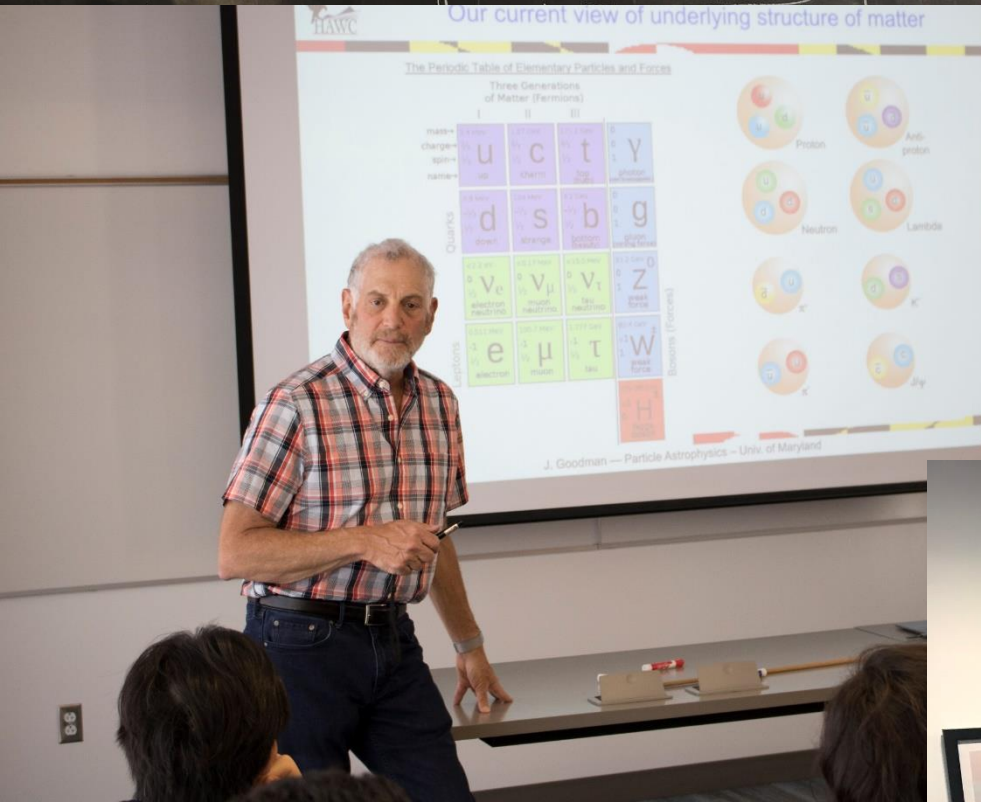


$$\begin{aligned} &\Delta x \\ &\Delta k x \\ &\Delta x \approx \\ &\Delta w \approx 1 \end{aligned}$$



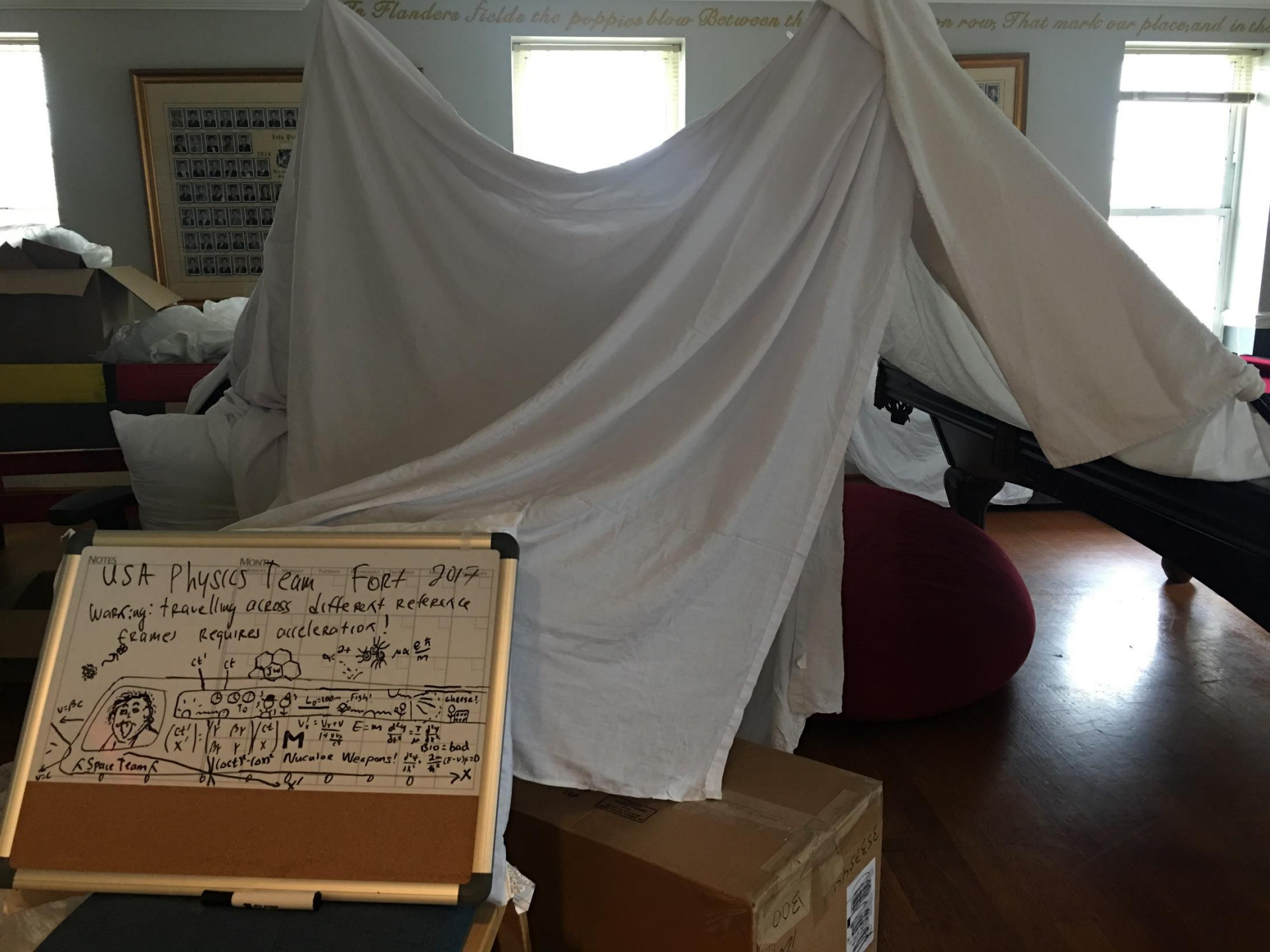
draw motion  
period?

# UMD Physics Dept



The Flanders fields the poppies blow Between the rows, That mark our place, and in the

rows, That mark our place, and in the



# USA Physics Team Fort 2017

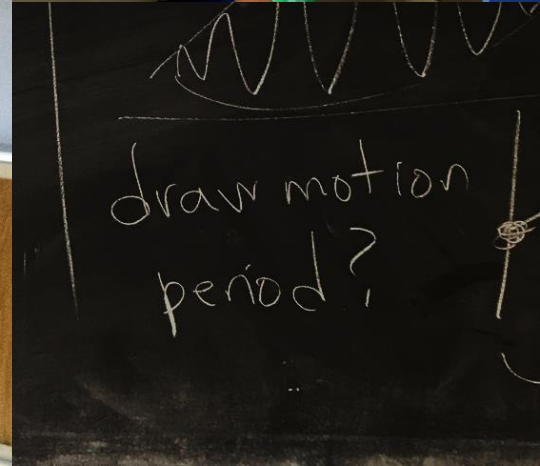
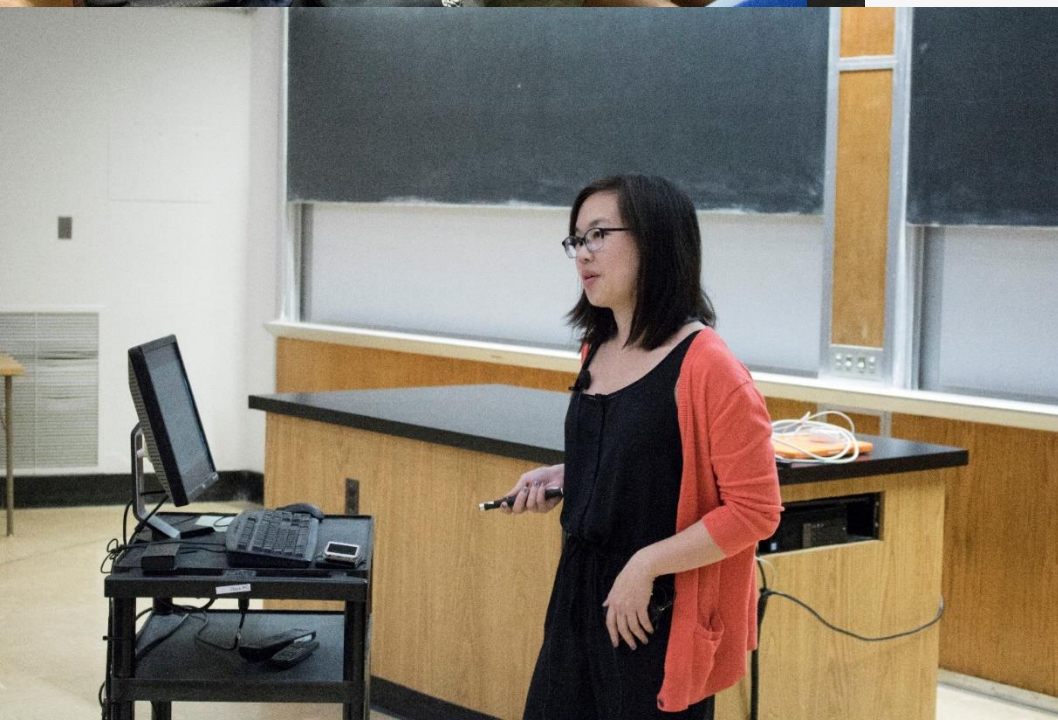
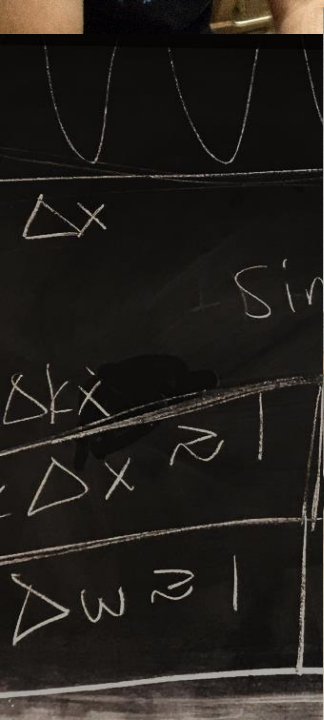
Warning: travelling across different reference frames requires acceleration!

Handwritten physics notes and diagrams on a calendar grid:

- Top left:  $ct'$ ,  $ct$  with a small diagram of a box.
- Top right:  $\mu \propto \frac{e^2}{m}$  with a diagram of a particle and a cross.
- Middle left: A drawing of a person's face with the text "K Space Team" below it.
- Middle: A diagram showing a path from "To" to "From" with a "Fish" icon. Below it,  $V_i = V_r + V$  and  $E = m \frac{d^2 y}{dt^2} = T \frac{d^2 y}{dt^2}$ .
- Bottom left: A coordinate system with axes  $x'$  and  $x$ , and a point  $M$ .
- Bottom right: "Nuclear Weapons!" with a diagram of a particle and a cross.
- Far right: "cherse!" with a diagram of a particle and a cross.

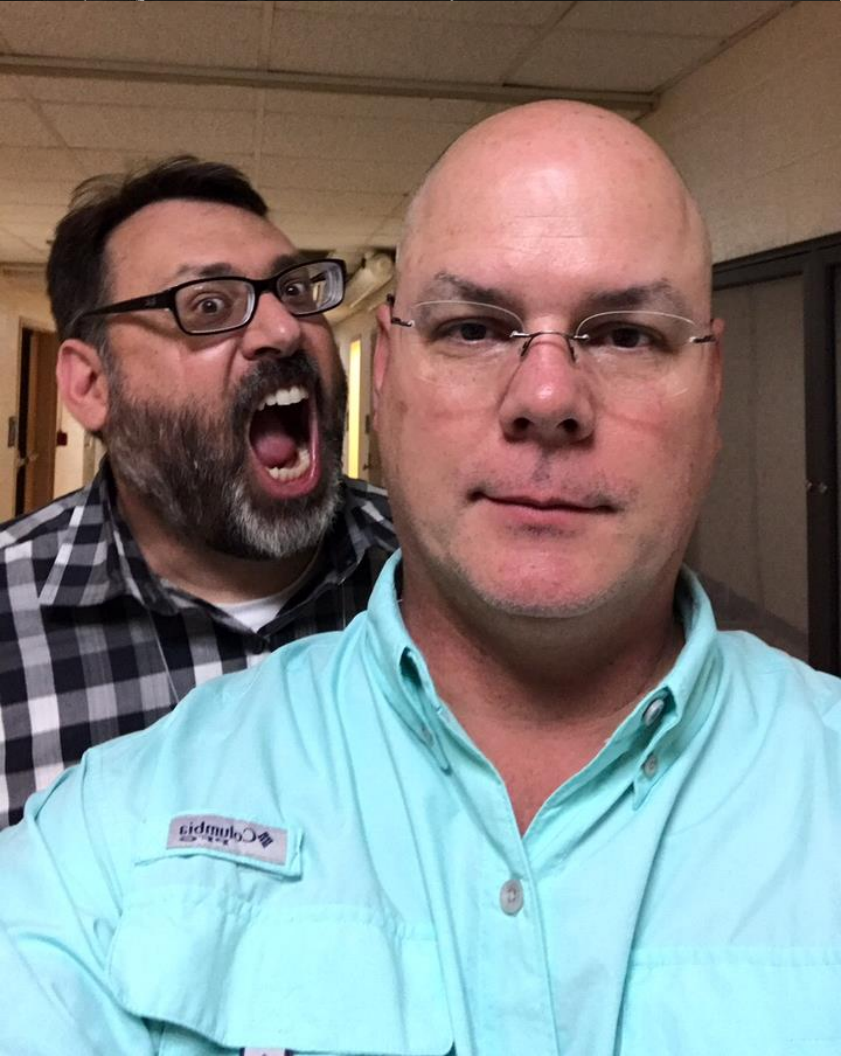
$$k = \frac{n\pi}{L}$$
$$k = \frac{n\pi}{L}$$
$$k = (2n-1)\frac{\pi}{2L}$$



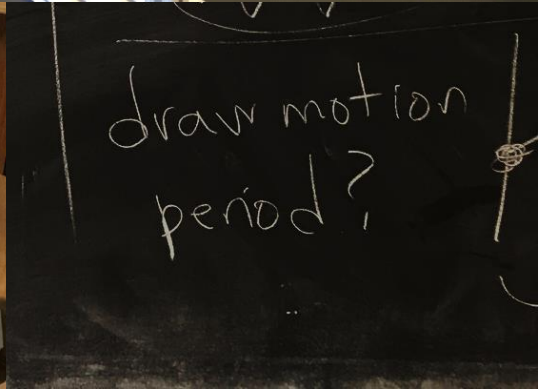
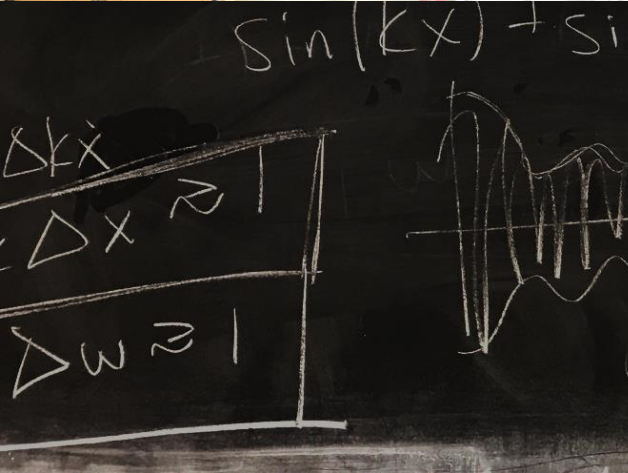
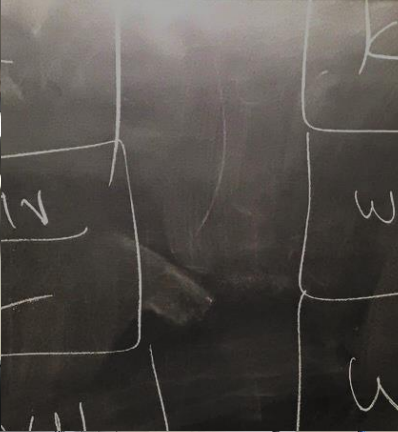
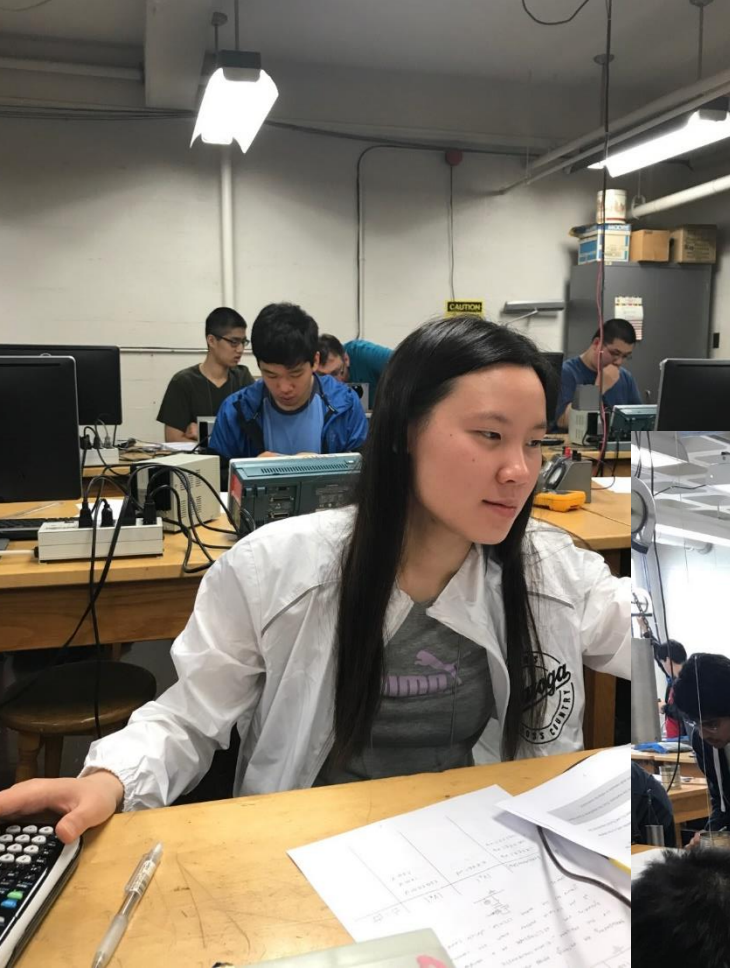


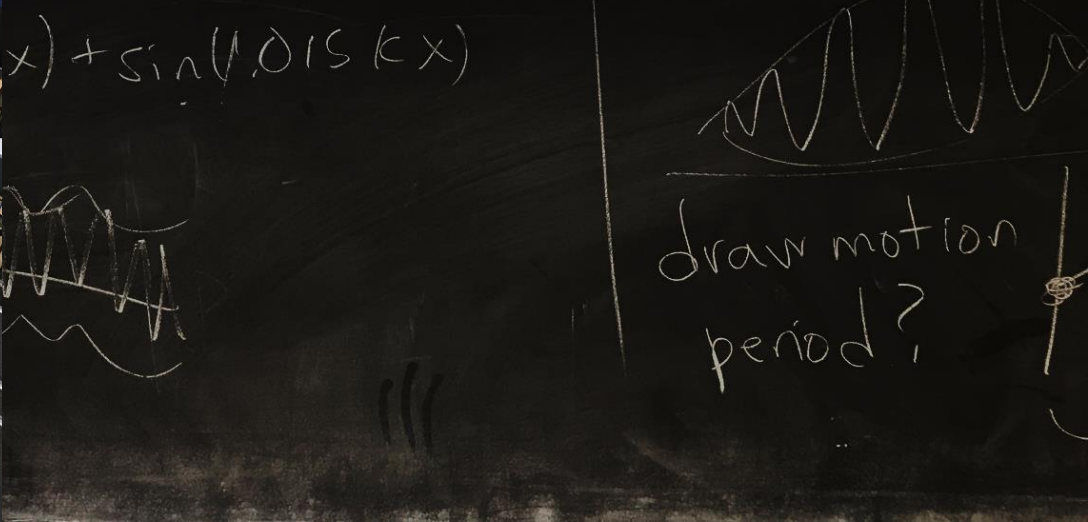
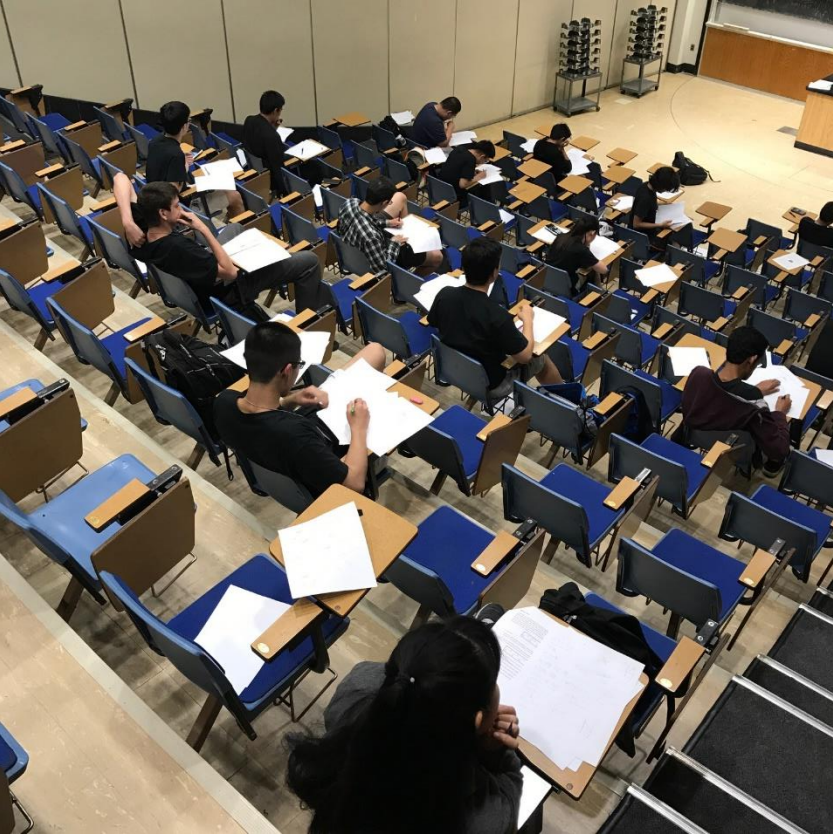
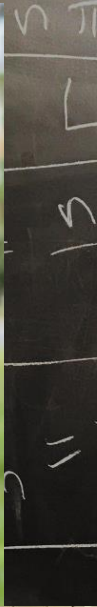
$$k = \frac{n\pi}{L}$$
$$\omega = \frac{n\pi v}{L}$$

$\sin(\omega t)$







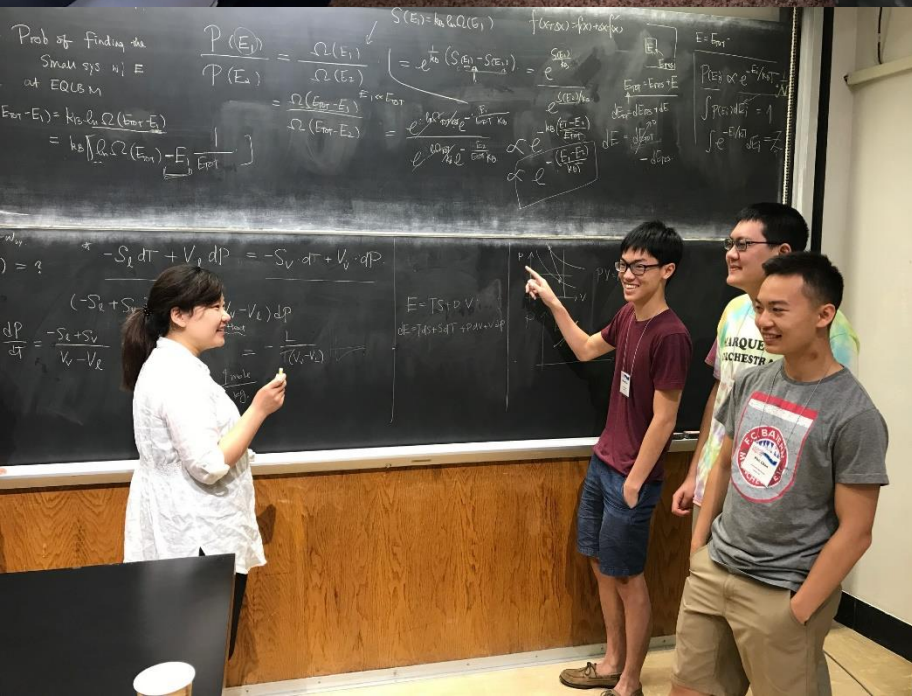




$$k = (2n-1) \frac{\pi}{2L}$$

$$W = vk$$

$$W = \frac{(2n-1)^2}{(2n-1)^2}$$



$$\sin(4.015)$$

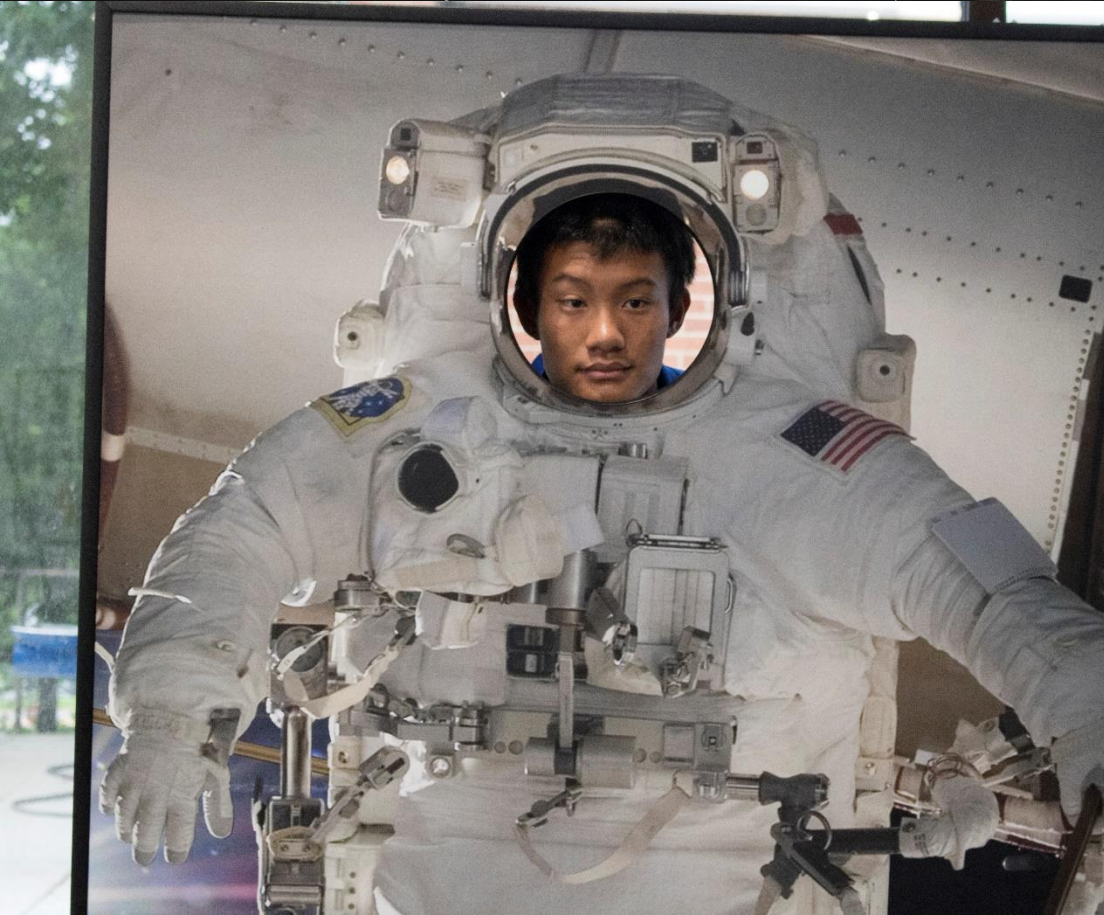
$k = \frac{n\pi}{L}$

$\omega = \frac{n\pi v}{L}$

$\omega_n = n\omega_0$

$\sin(\omega t)$

$\omega$ 's.





$$L = (2n-1) \frac{\pi}{2L}$$

$$W = \frac{n \pi V}{L}$$

$$W = vk$$

$$= (2n-1)$$

$$= (2n-1)^2$$

$$n(k, x) + \sin$$

raw motion  
period?

$$= 0, L$$

-ing(wt)

W's.

$\sin(k$

△KX

$\Delta x \approx 2$

$$\Delta w \approx 1$$