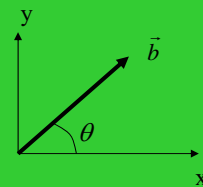# PHYS 210 - General Physics I
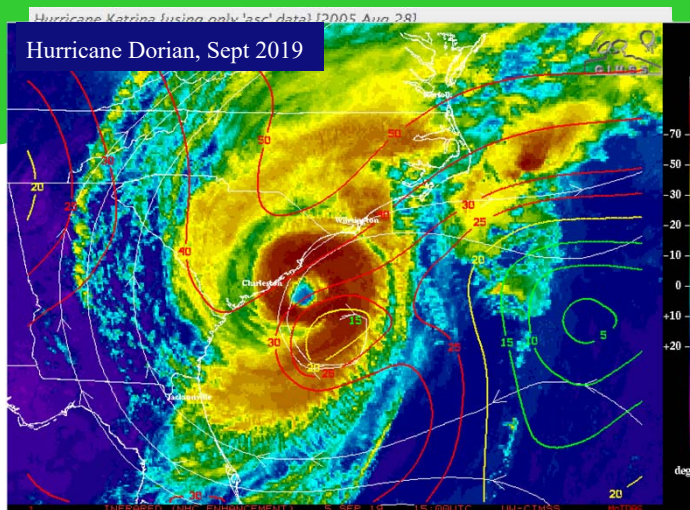
y

$\vec{b}$

θ

x

- Vectors
- Average and instantaneous velocity
- Problem solving
- Seeds of calculus: instantaneous velocity
- Motion at a constant acceleration

Hurricane Katrina [using only 'asc' data] [2005 Aug 28]

Hurricane Dorian, Sept 2019

Title:
Tales of 14 Telescopes: A Sabbatical Report

Presenter:
Dr. Christer Watson
Professor of Physics
Manchester University

Science Seminar

hosted by
Natural and Health Sciences

FIRST SEMINAR OF THE YEAR!

September 9, 2019
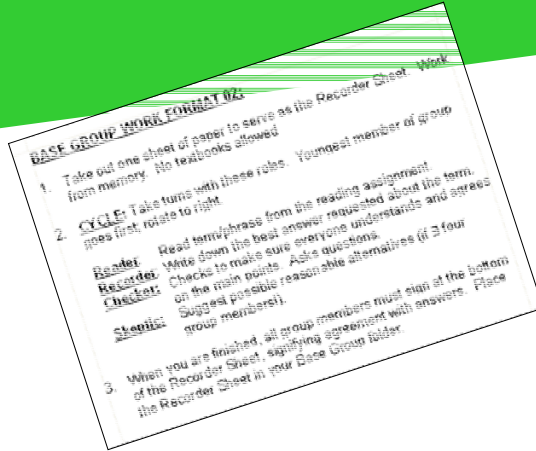**Physics Department**
4:00 – 5:00 PM
Flory Auditorium (SCIC 203)

EVERYONE is welcome!
ALL MAJORS, ALL YEARS
Snack Provided

Manchester University

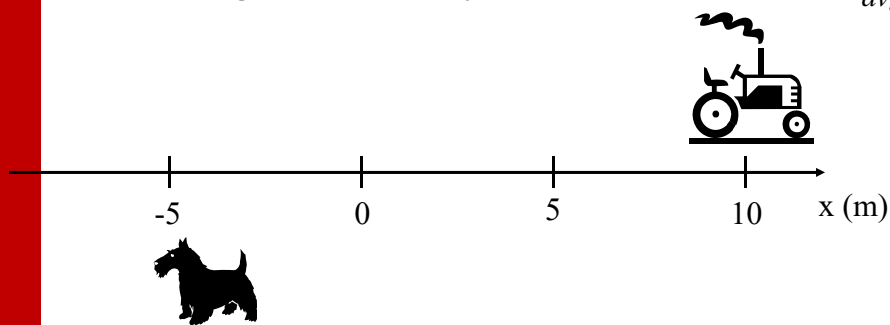- BGDG: Best book read in last year?
- BGWS (follow procedure!)
- Group Processing
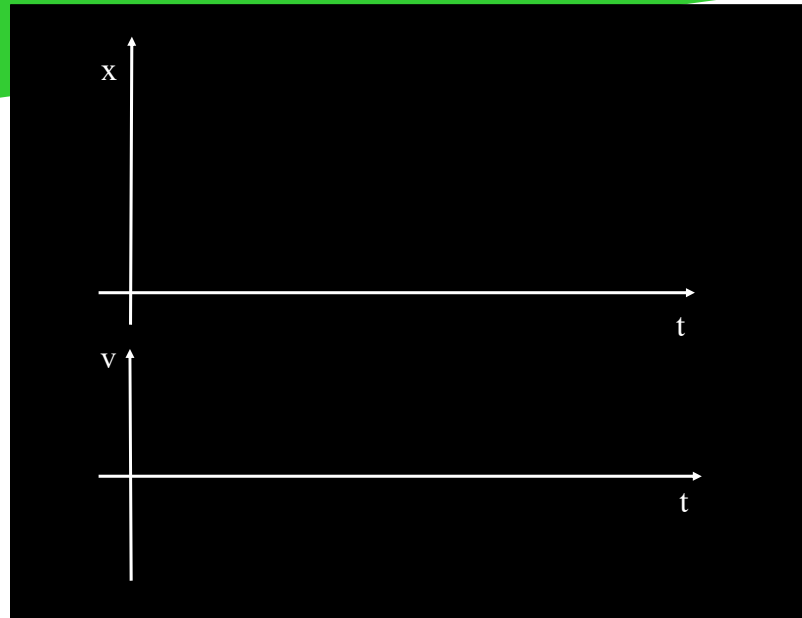- RQ

Average velocity

Defining a coordinate system is critical for success in describing motion mathematically!

Positive velocity

Negative velocity

$$\vec{v}_{avg} = \frac{\Delta \vec{r}}{\Delta t}$$

-5   0   5   10   x (m)

2

Motion graphs

x

t

v

t

Motion Diagrams

❖ What type of motion is represented by this motion diagram if the object represented is moving to the right?

•   •   •   •   • •

❖ What if the object is moving to the left?

Motion diagrams

- We can indicate positions of our motion diagram points using Cartesian coordinates (if you define a coordinate system!)

OR

with

Vectors!

Have a nice Monday!

Go to Science Seminar!