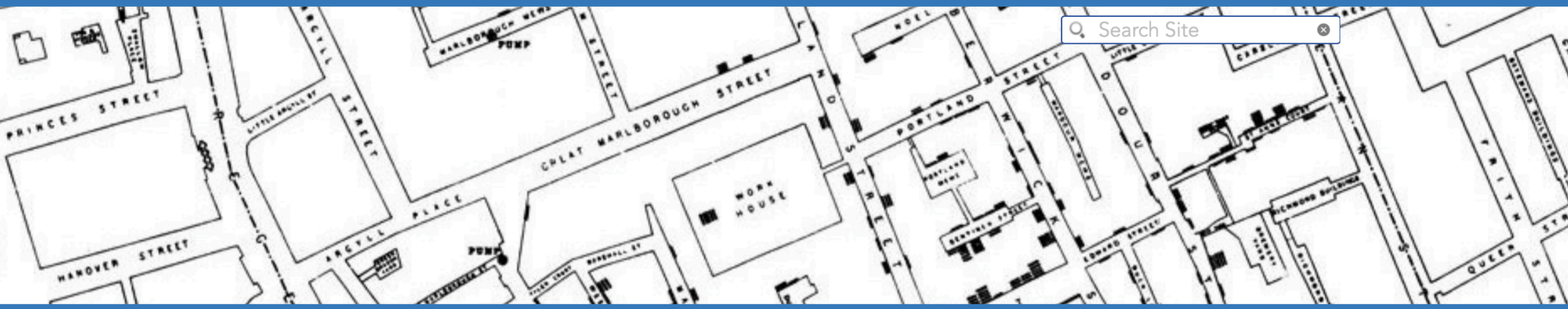
Welcome to the future.

The Prediction Project

The Past and Present of the Future



Prediction Essentials

Take a look at the essential elements of the course, including the framework for predictive systems.

→

Omens & Oracles

Gain insight into prediction as a human venture by studying the most ancient forms of prediction in Omens and Oracles.

→

Rise of Theory

Learn how humanity moved from mystical divination practices to genuine, scientific theories to explain natural phenomena.

→

Modern Prediction

Discover the cutting edge predictive methods and modeling from preeminent experts across many fields.

→

How it all fits together

Our project has four main sections, fitting together to offer a broad overview of how humanity has predicted its future throughout history

The Prediction Project

PredictionX: The Past & Present of the Future

Essentials

Predictive Systems Framework

The "Padua Rainbow"

Understanding Uncertainty

Study Design

Timelines

Why predict?

Omens, Oracles & Prophecies

Mesopotamian Haruspicy

Egyptian Priests

Yoruba Ifa

Tarot

Roman Augury

The Diviner's Guide

Casting Lots

Chinese Oracle Bones

Greek Astronomy

Oracle of Delphi

Turkish Tasseography

Astrology

Aztec Rituals

Maya Spacetime

Comets of Doom

cross-cultural conversations

The Rise of Theory

Ancient Mesopotamia, Egypt, Greece & Rome

Islamic Science

The Path to Newton

Indian Mathematics

European Renaissance

Lost without Longitude (Navigation)

Help, I'm Lost!

Tools of the Navigator

The Royal Society

Modern Prediction

John Snow & Cholera

Cholera Map

Health

Epidemiology

Personal Genomics

Population Genetics

Wealth

Climate & Wealth

Behavioral Economics

The Future of the Future

AI, Derek's Day

Philosophy

Uncertainty

Earth

Climate & Energy

Climate Policy

Tent Tarot

Earthquakes

Space

Futures of our Universe

SETI

Interactive Resource ▶video(s) Coming Soon visit predictionx.org for more information on the Prediction Project

Harvard College
Program in General Education
Explore. Expand. Engage.

predictionx.org

edX HarvardX LabXchange

We will go over all the parts of the syllabus later today (just not right now).

PREDICTION: THE PAST & PRESENT OF THE FUTURE

Harvard GenEd 1112

COURSE CANVAS SITE • PREDICTION PROJECT WEB SITE

INSTRUCTOR

Prof. Alyssa GOODMAN, *Robert Wheeler Willson Professor of Applied Astronomy* [website]
Contact: agoodman@cfa.harvard.edu or, preferably, via Canvas
Office Hours: please contact Anna Nolin (anna.nolin@cfa.harvard.edu) for an appointment

---

INSTRUCTIONAL STAFF

Teaching Fellows in this course will lead discussion sections once per week, at times to be arranged. Each will have a one-hour office hour, with times to be arranged once section timing is known.

Declan Maloney, *PhD candidate in Akkadian & Sumerian Studies, Graduate School of Arts and Sciences*
Contact: declanmaloney@g.harvard.edu
Office Hours: TBA

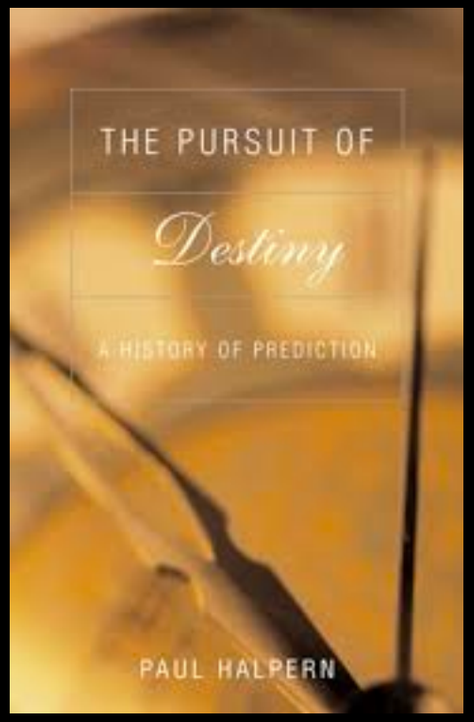
Kevin Ortiz Ceballos, *PhD candidate in Astronomy, Graduate School of Arts and Sciences*
Contact: kortizceballos@cfa.harvard.edu
Office Hours: TBA

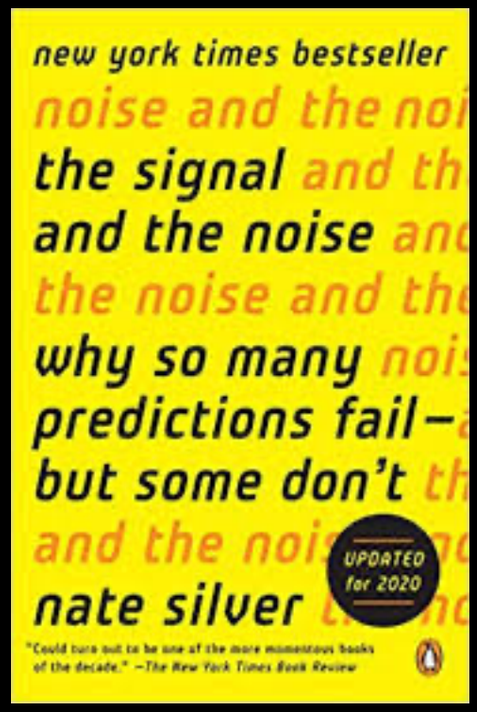
Plus **two** additional Teaching Fellows, to be confirmed 1/26/23.

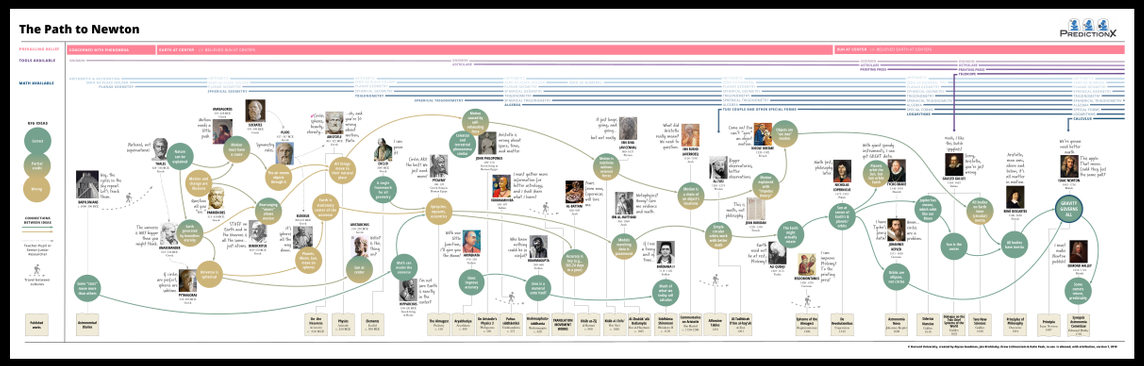
STUDENTS

We value contributions from each student, and we hope to get to know you. Please fill out your biographical profiles on Canvas to help us learn more about you!

Yes, the course is very "multimedia"…







Prediction-Relevant Films & Documentaries

(in-process community list, to be tagged by topic soon!)

Action

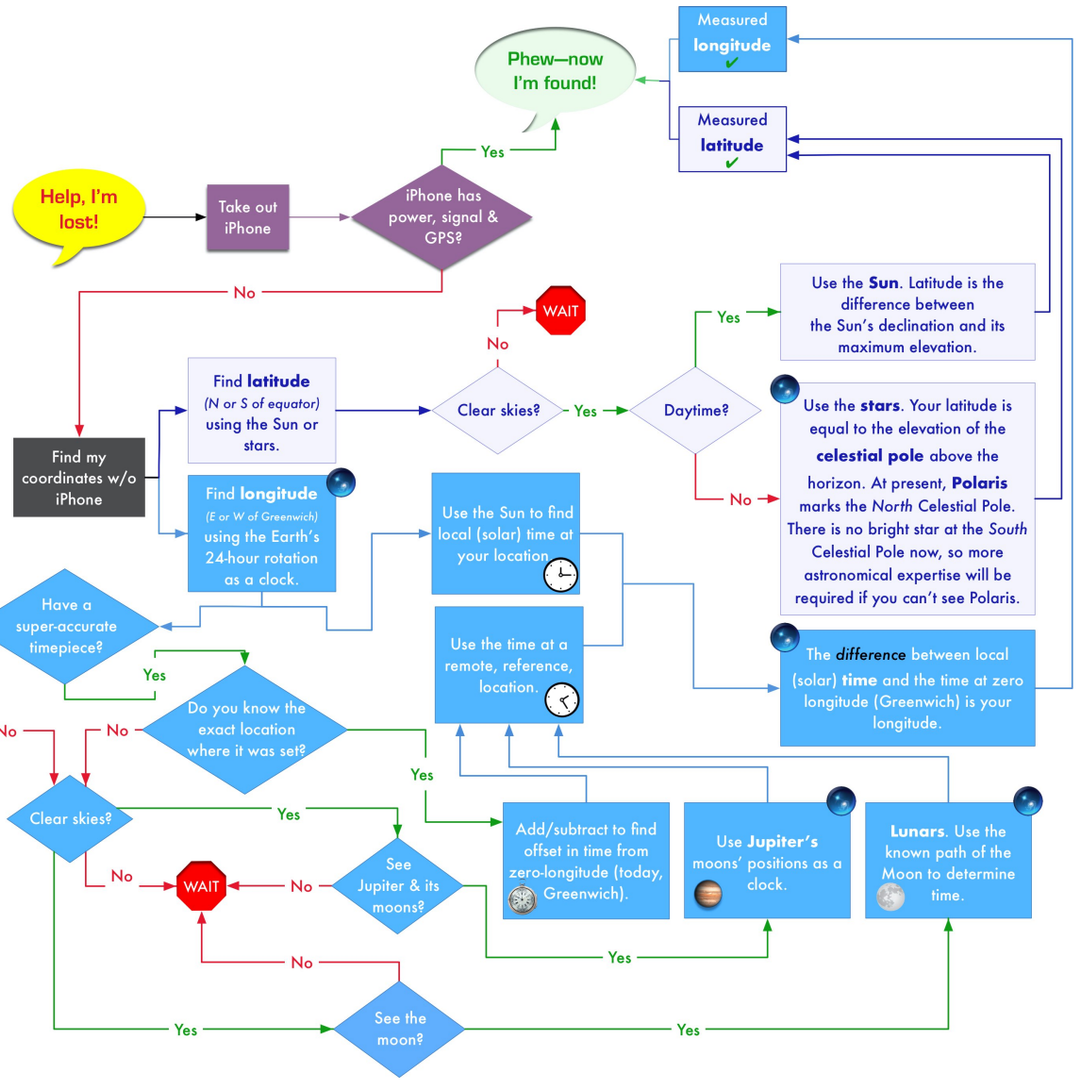
Minority Report
Kingsman: The Secret Service
Now You See Me
The Hustle
Jurassic World
San Andreas
Everything Everywhere All at Once

Comedy
22 Jump Street
Ride Along
This is the End
Holmes & Watson
Tower Heist

Children's
Wall-E
Tommorowland
Meet the Robinsons
The Princess and the Frog
Zootopia

Drama
The Big Short
The Social Network

PREDICTIONX



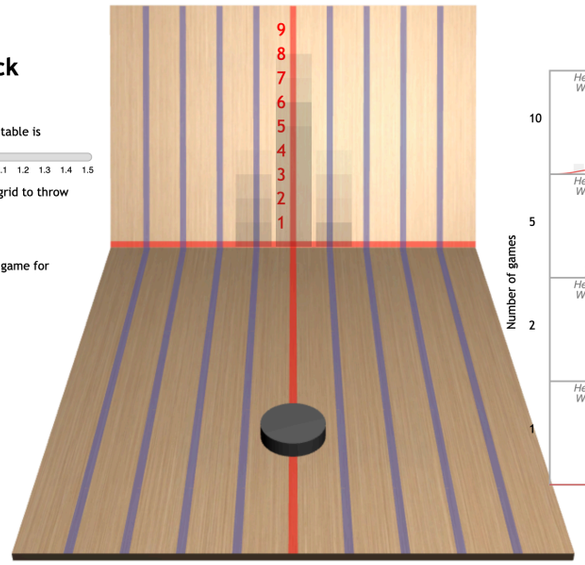
Slide-the-puck

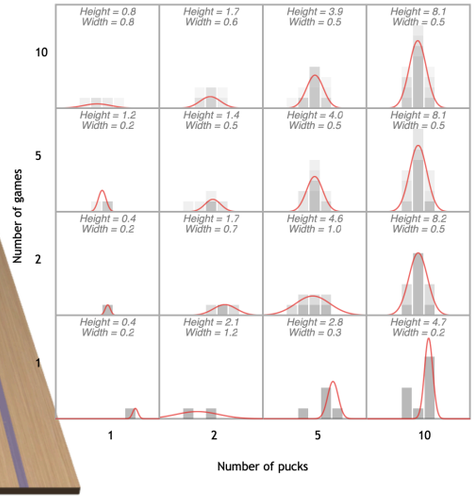
1. Decide how rough your table is

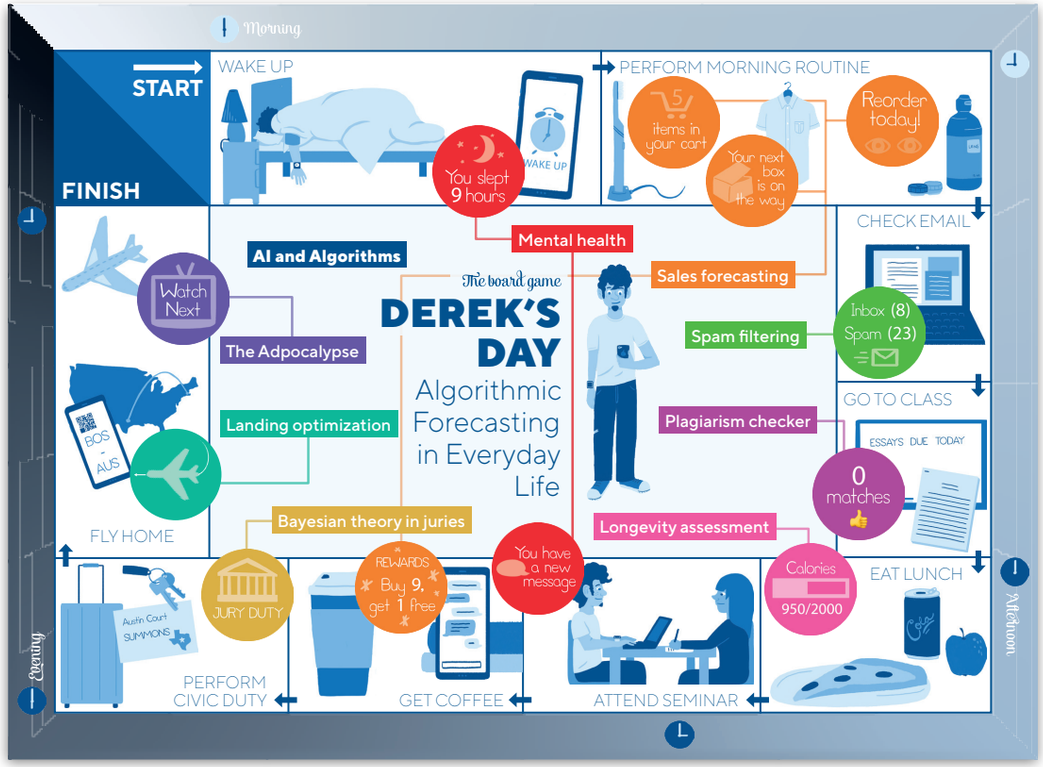
0.5 0.6 0.7 0.8 0.9 1 1.1 1.2 1.3 1.4 1.5

2. Click anywhere on the grid to throw the puck

3. Click here to finish the game for you







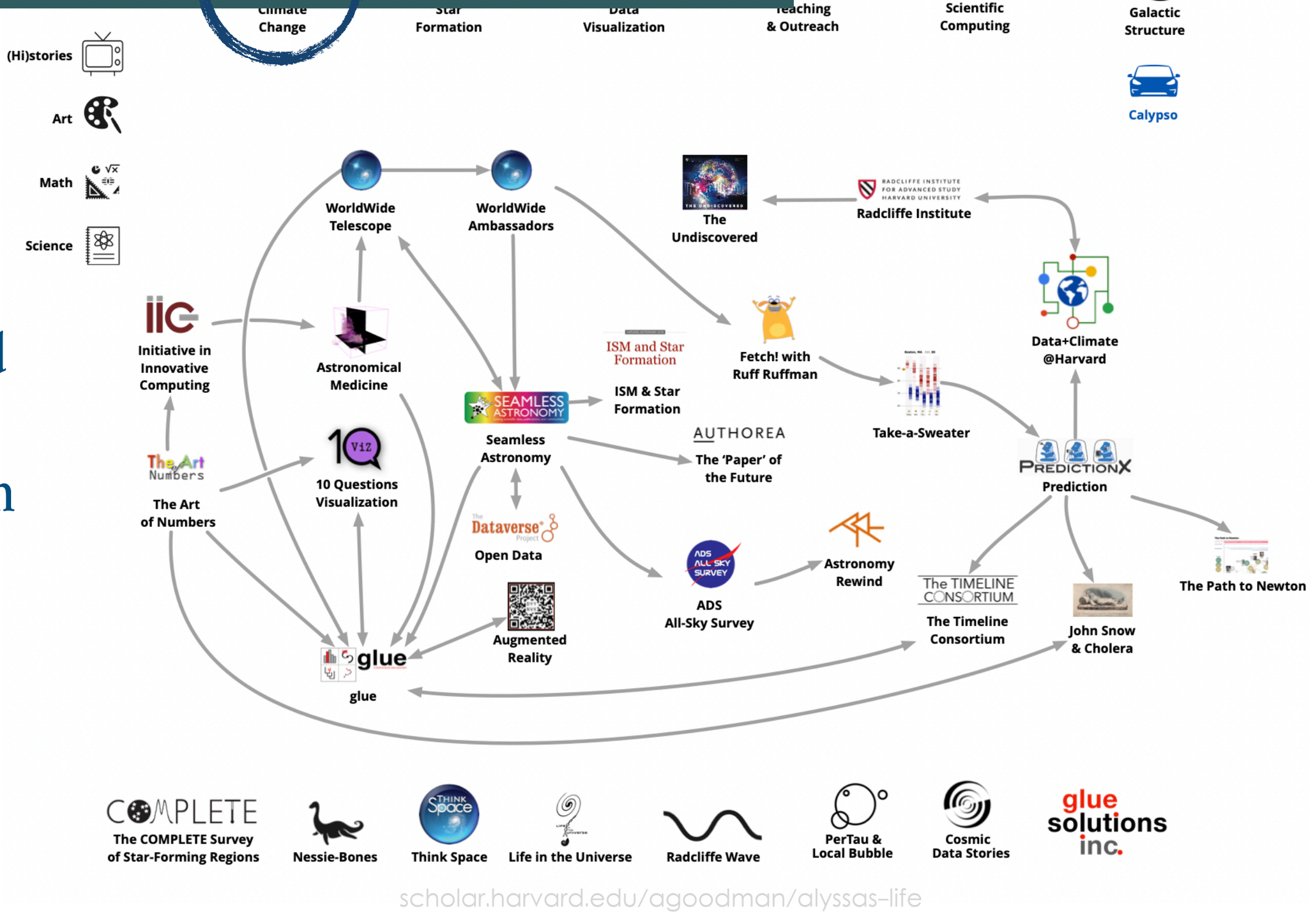
Prediction: Week 1

Who is Alyssa?	Where did this course come from?	Who are you? Poll	
What's the course about? (overview diagram)	What do you think/know about Prediction? Poll		
predictionx.org demo	Syllabus/Canvas demo	edX demo	LabXchange demo
Why predict?	Framework for Predictive Systems	Padua Rainbow	
How do weather forecasts work? survey	Breakout discussions	full class discussion	
take-a-sweater demo	uncertainty (tables)	uncertainty (full group)	
Your future in GenEd1112	Prediction Journals	Final Project Thoughts	
What's a *prediction*? survey	Breakout discussions	full class discussion	

Who is Alyssa?

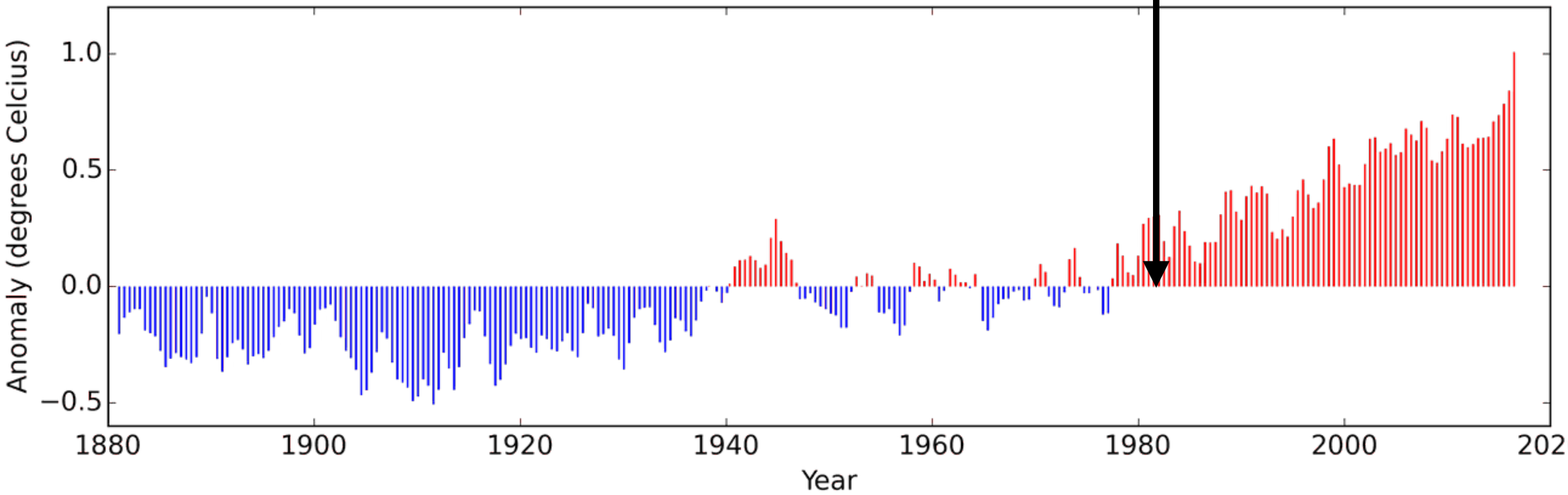
Where did this course come from?

Why & how is a physicist interested in Cuneiform tablets?



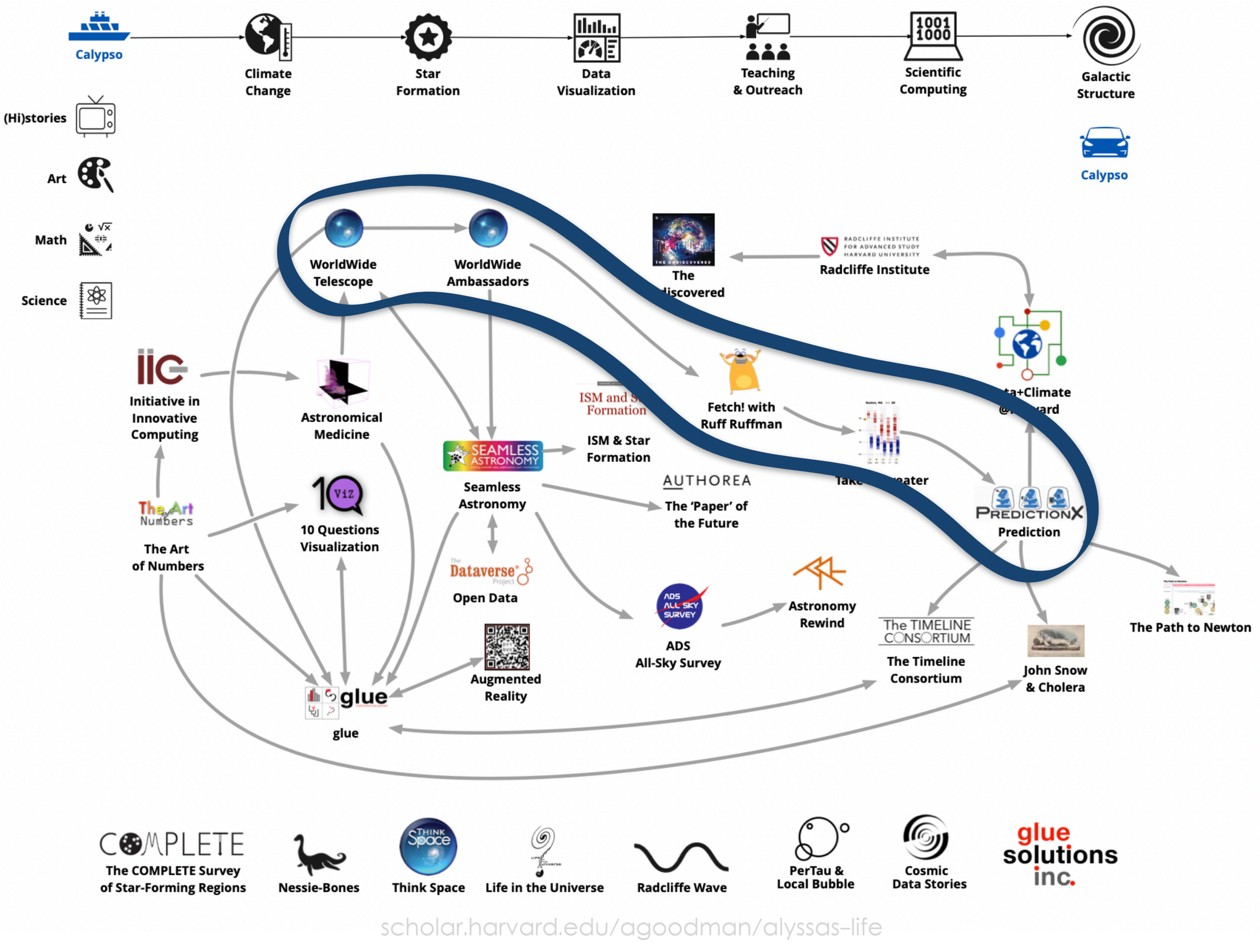
ORIGINS

1983 NASA/GISS INTERNSHIP
WITH JAMES HANSEN



graph reproduced from: https://electricitymap.org/blog/clean-electricity-production-whos-ahead/, citing NASA GISS

Alyssa's Life, So Far v.2023



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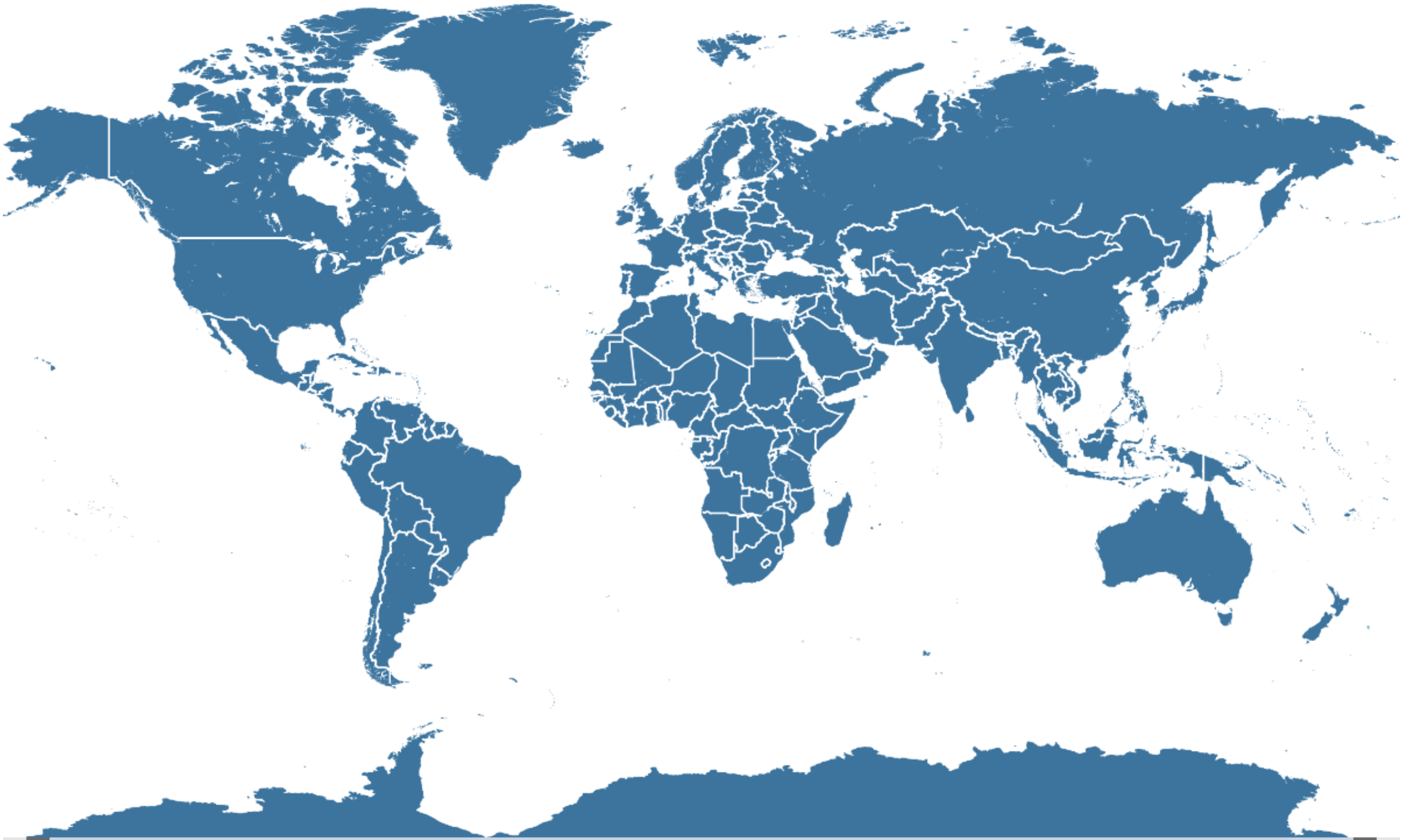
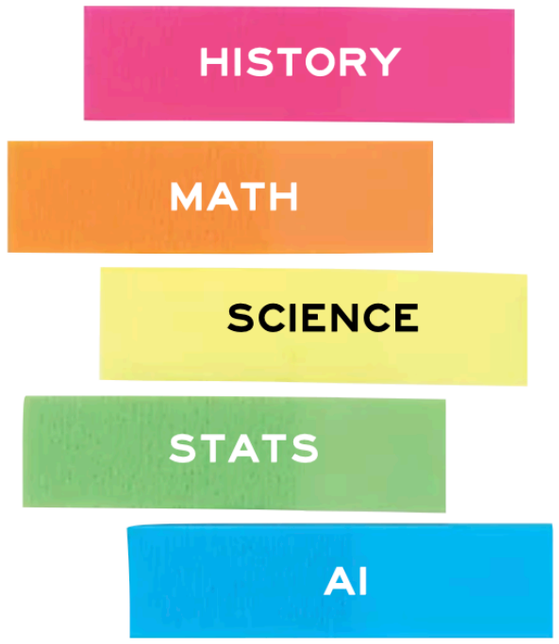
Where are you from (up to 5 places)?

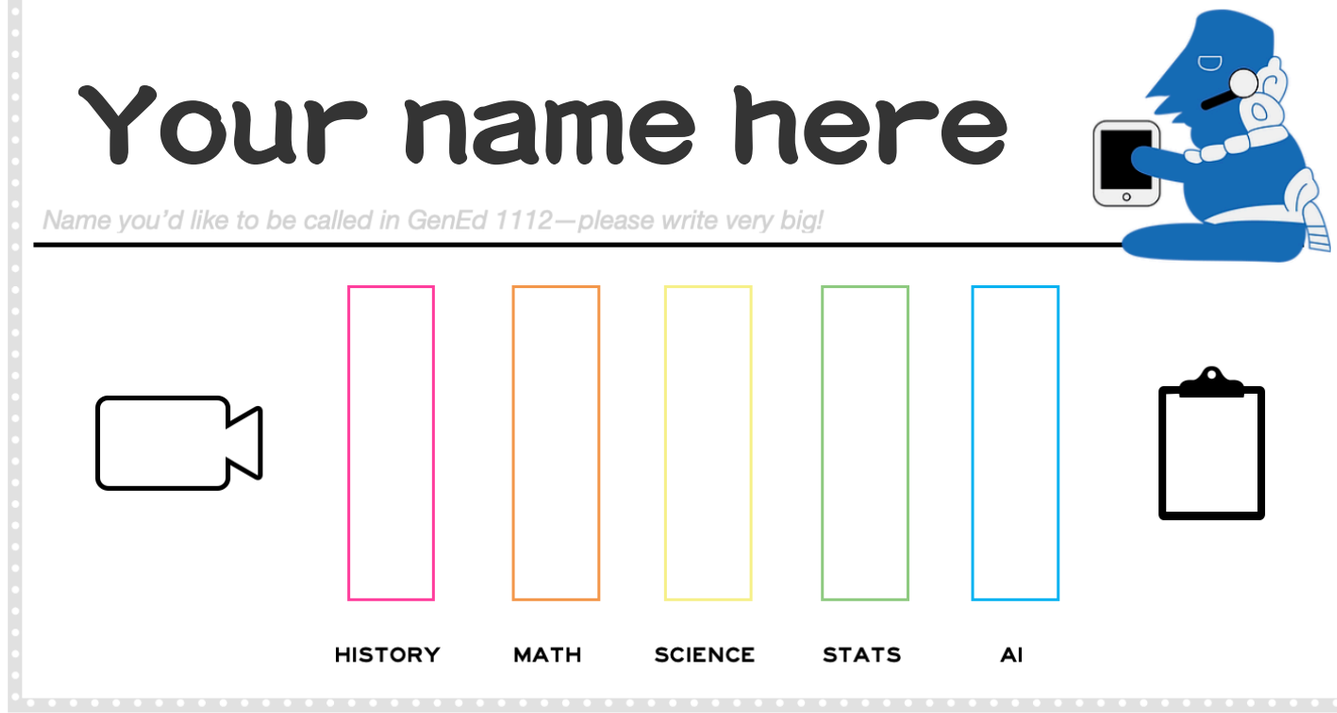


What is (are) your concentration(s)/interests? (up to 3 replies)

***Instructions**: on the other side of this tent card, place colored flags in appropriate boxes for all topics you already love. Shade in either of the icons (video or writing), if you are familiar with creating and posting videos online, and/or if you are great at creating clear and concise Google Docs. This side of the card is only for your reference while the reverse faces others.*



And we'll ask more about you, soon…



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Comets of Doom

cross-cultural conversations

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Ancient Mesopotamia, Egypt, Greece & Rome

Islamic Science

The Path to Newton

Indian Mathematics

European Renaissance

The Royal Society

Lost without Longitude (Navigation)

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Tools of the Navigator

Modern Prediction

John Snow & Cholera

Cholera Map

Health

- *Epidemiology*
- *Personal Genomics*
- *Population Genetics*

Wealth

- *Climate & Wealth*
- *Behavioral Economics*

The Future of the Future

- *AI, Derek's Day*
- *Philosophy*
- *Uncertainty*

Earth

- *Climate & Energy*
- *Climate Policy*
- *Tent Tarot*
- *Earthquakes*

Space

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- *SETI*

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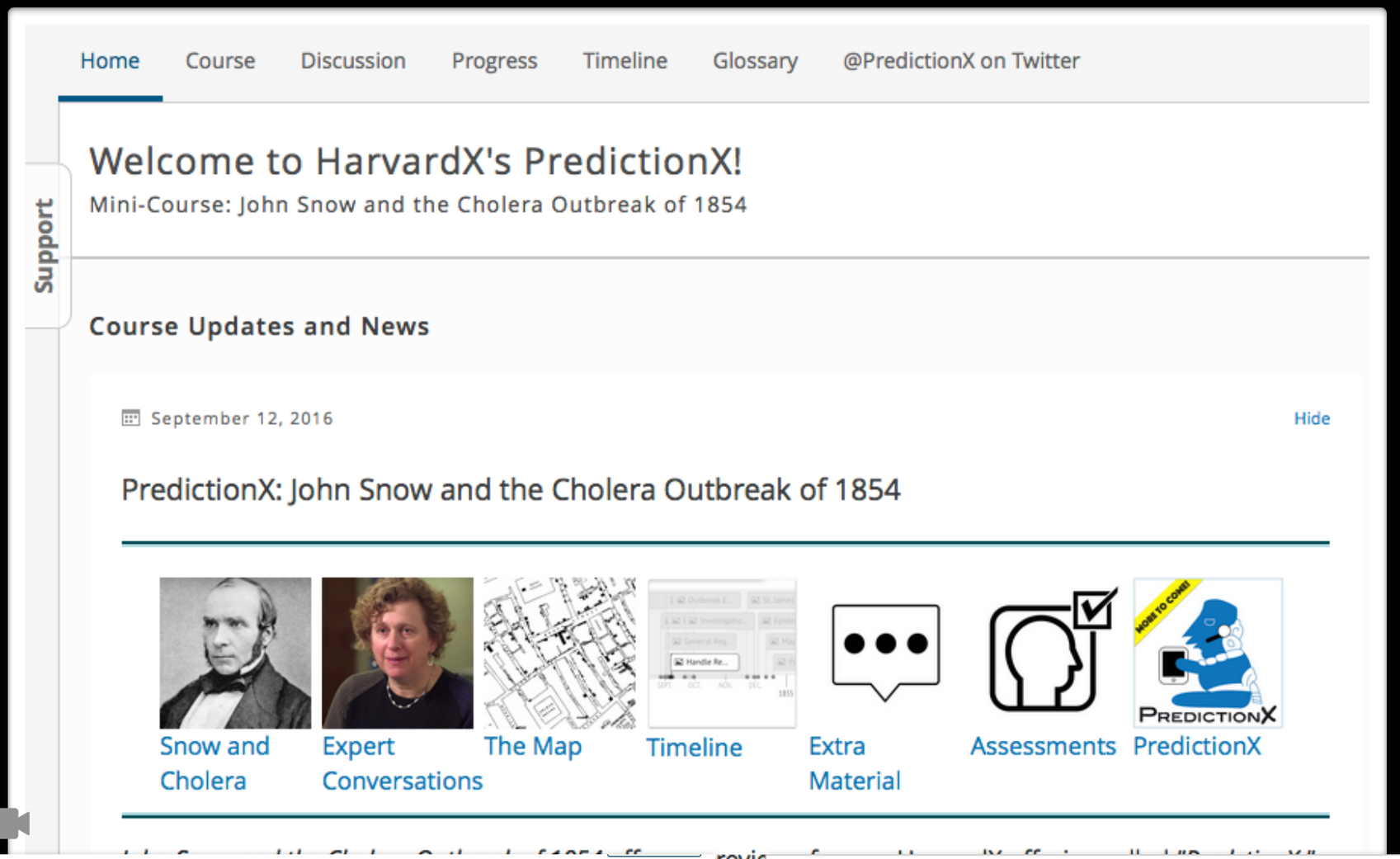
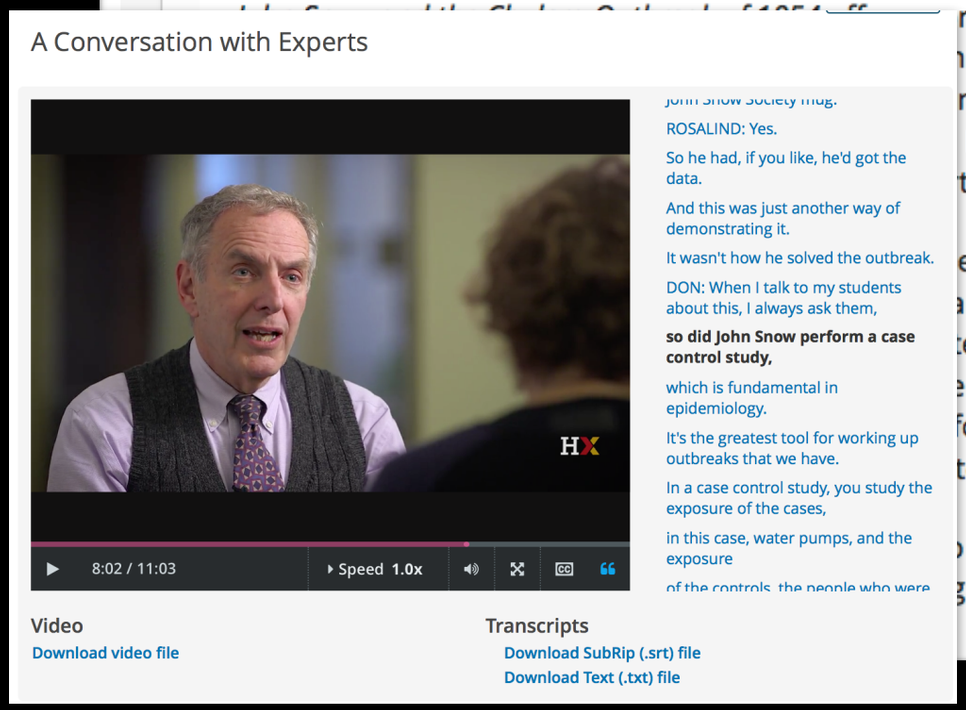
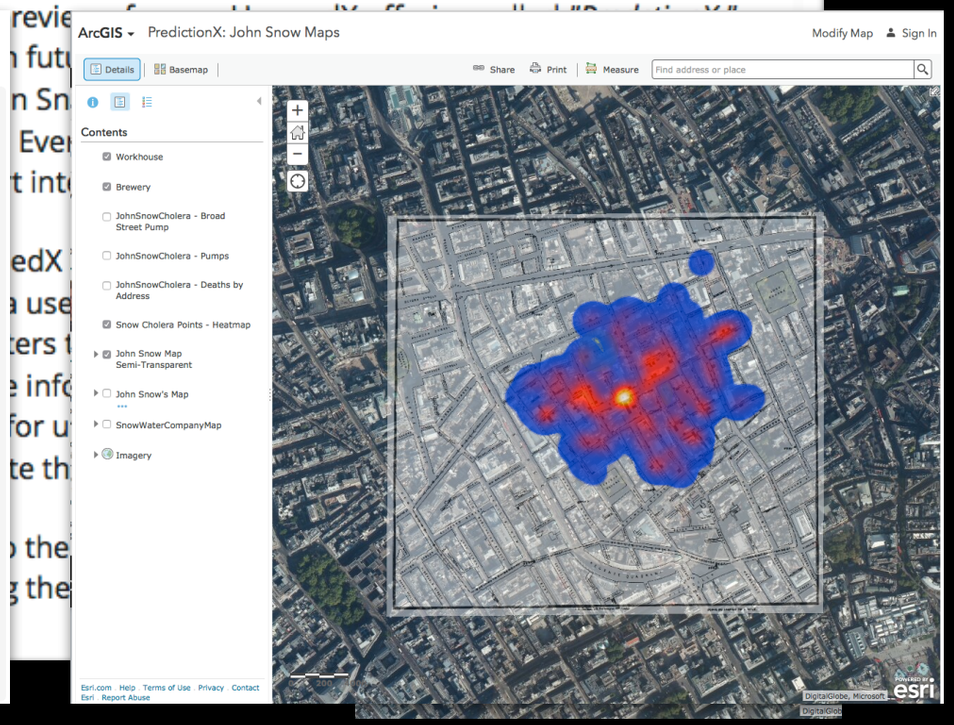
edX HarvardX LabXchange

John Snow & Cholera







featuring Don Goldmann, AG & Rosalind Stanwell-Smith

Prediction: Day 7

opening remarks on COVID-19 & plans for the rest of GenEd1119

quick review of outdoor **Navigation Exercise**

questions about **"Prediction in Space & Time" re:Navigation, *and Epidemiology***

John Snow & Cholera (edX highlights & more)

Student research/discussion re:COVID-19 using survey at **tinyurl.com/gened1112covid19**

Modeling** the spread of epidemics, and **uncertainty

Bookkeeping **SIR Models** **SEIR Models** **Agent-based models** **AI models**

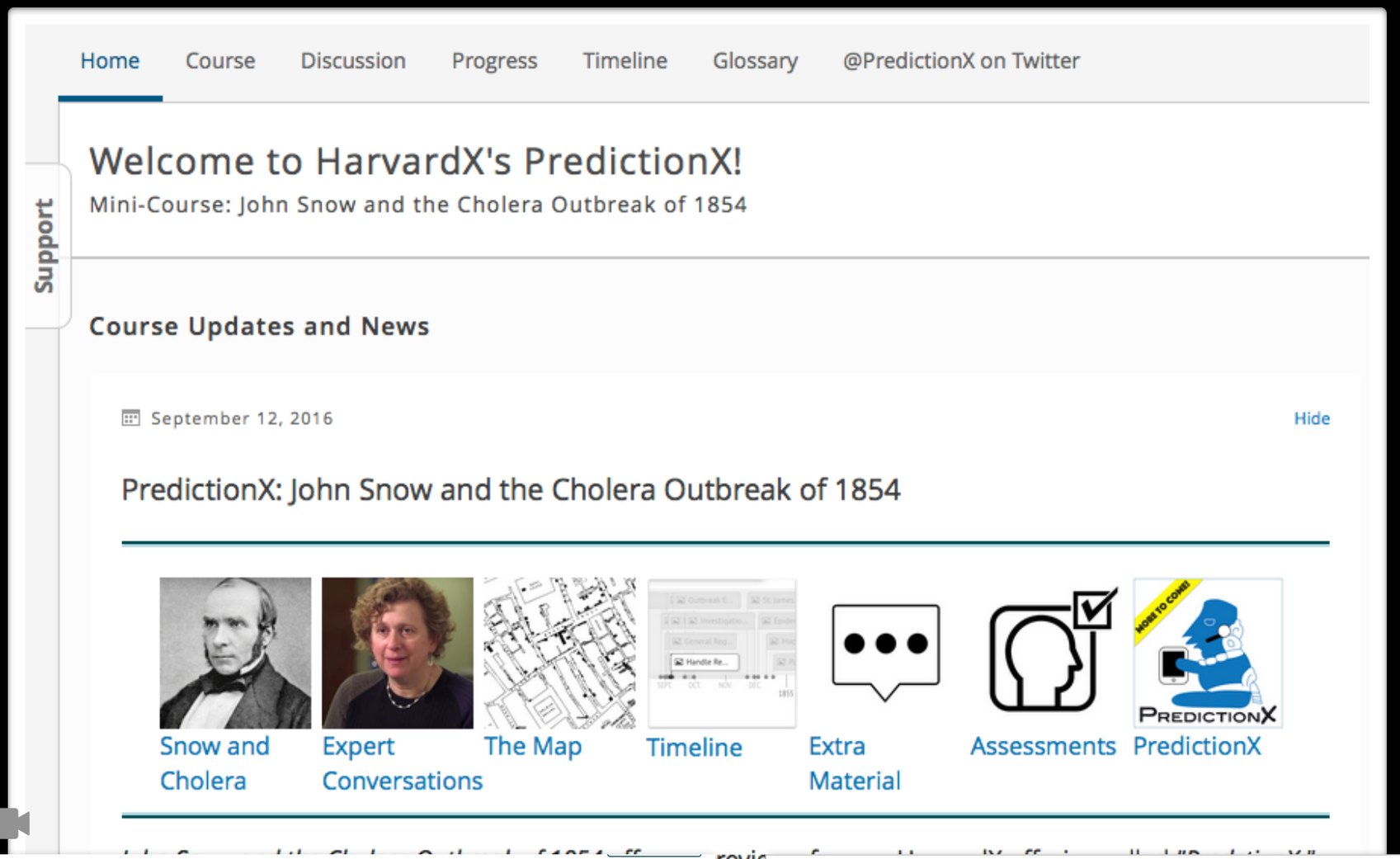
Prediction and decision in the face of **uncertainty**: COVID-19 and Harvard (discussions)

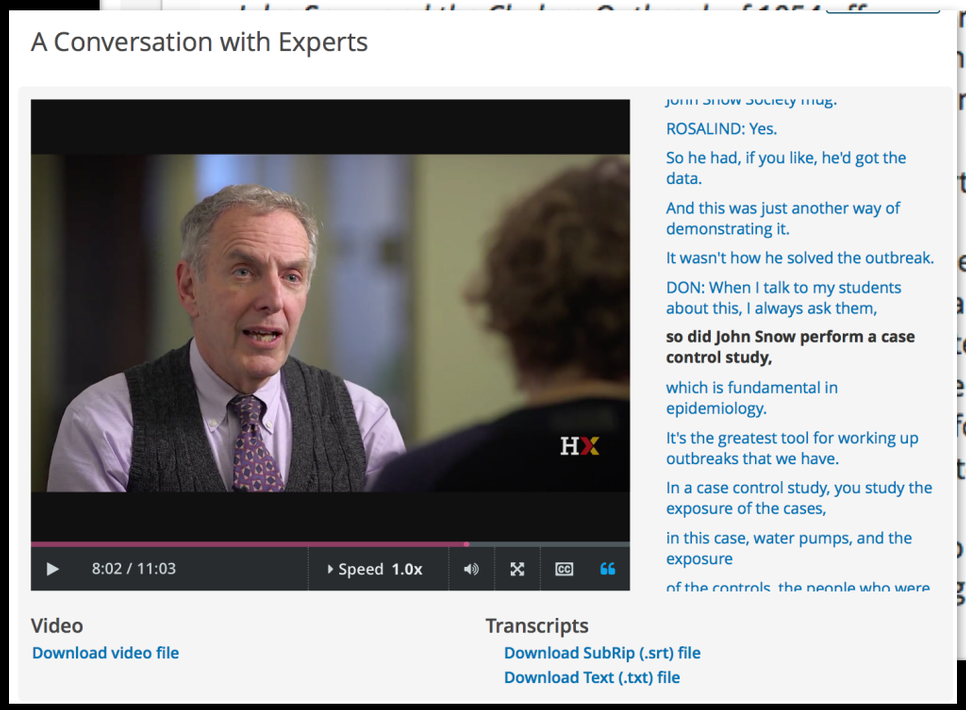
Logistics post-Spring-Break

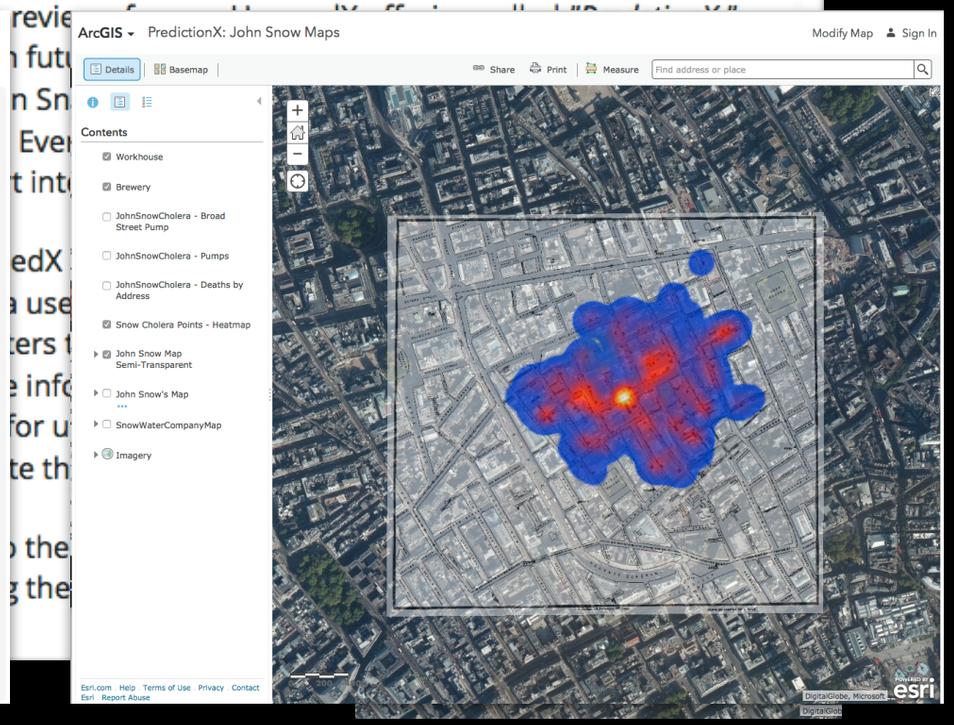
Special Guest: geneticist **Dr. Immaculata DeVivo,** Professor in the Department of Epidemiology at the Harvard T.H. Chan School of Public Health and at Harvard Medical School

Wednesday, March 11, 2020

John Snow & Cholera







featuring Don Goldmann, AG & Rosalind Stanwell-Smith


income
housing
water
Trinity College
00:47:02:23
00:21:47:16

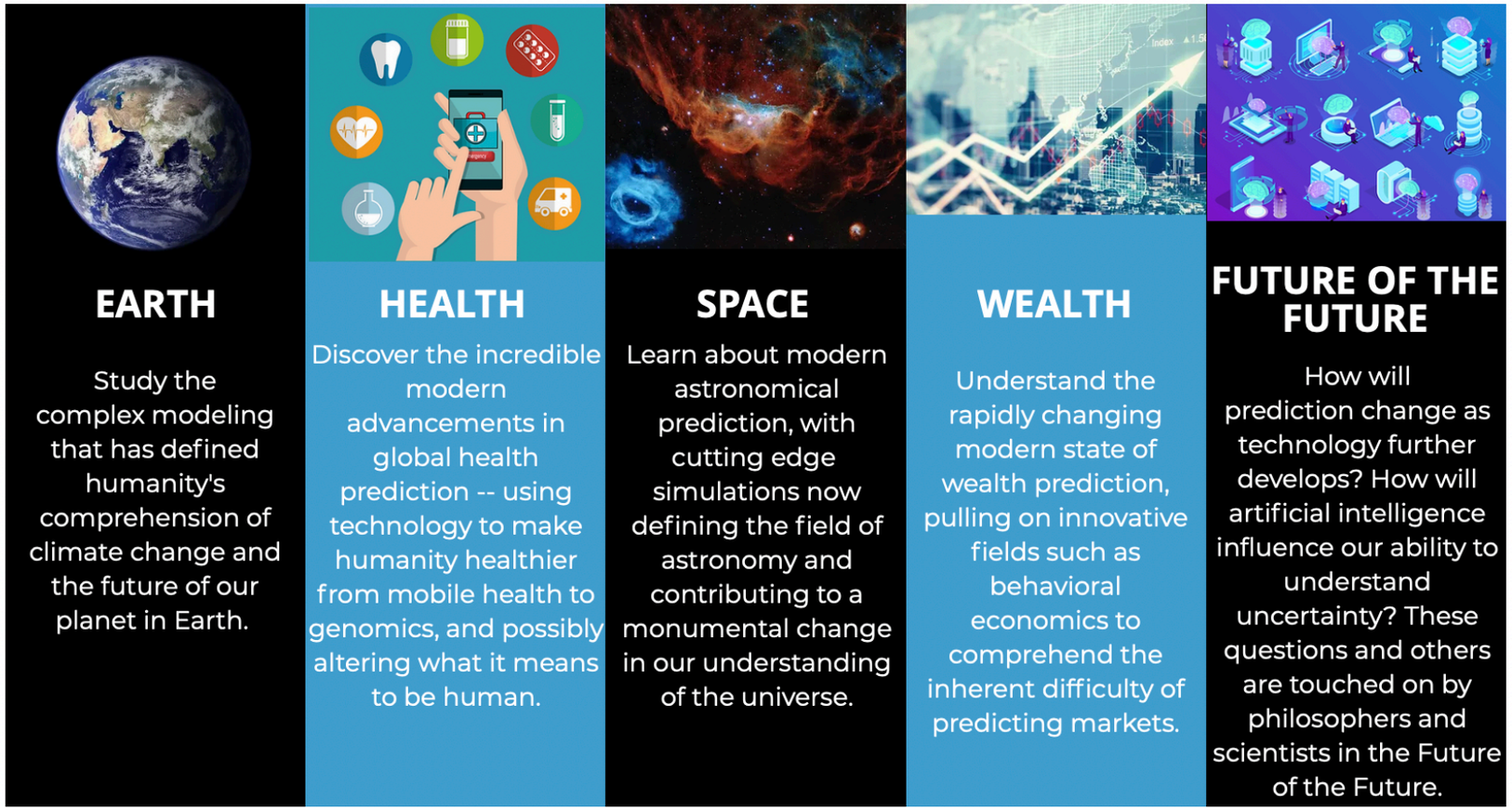
“Modern Prediction” Interviews at PredictionX.org

Prediction & Philosophy	Agustin Rayo
Prediction in Astrophysics	Avi Loeb
Artificial Intelligence	Ben Shneiderman
Predicting Health, and Earthquakes	Brendan Meade and Susan Murphy
Prediction & Psychology	Dan Gilbert
The Future of Energy and the Earth	Dan Kammen
Behavioral Economics	David Laibson
Personal Genomics	George Church
Climate Change	Gina McCarthy
Population Genetics	Immaculata De Vivo and Peter Kraft
The Search for Extraterrestrial Intelligence	Jill Tarter
Epidemiology	Megan Murray
Philosophy & Prediction	Ned Hall
The Business of the Future of Energy and the Earth	Rebecca Henderson
Uncertainty in Science	Stuart Firestein

Modern Prediction

Prediction is everywhere in the modern world, making up essential aspects of almost every part of our lives. From checking the weather on your phone, knowing when you will arrive to work, to longer term predictions of the success of your stock portfolio and your personal health goals. This section of the course examines five areas of modern prediction: Earth, Health, Wealth, Space, and the Future of the Future -- which looks at the driving forces currently changing our own conceptions of prediction, including artificial intelligence and machine learning -- to give learners a picture of the state of modern predictive methodologies. Select which modern form of prediction you want to study first by **clicking on an image of the topic you want to study** using the interactive menu below.

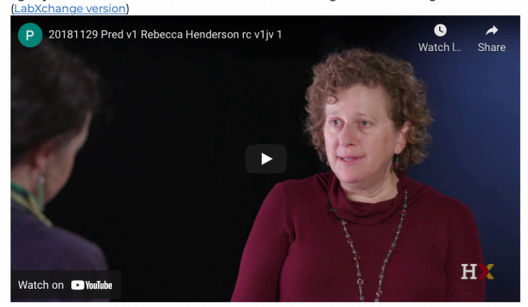
This site contains our prediction videos uploaded on YouTube; to enjoy them in their full format with video annotations and useful links, check out our [Modern Prediction cluster on LabXchange](#).



SAMPLER(!)

Corporations and Climate with Rebecca Henderson:

Alyssa speaks with Harvard University Professor Rebecca Henderson about organizational rigidity as an essential barrier to overcome in order to mitigate climate change. (LabXchange version)



Climate Policy with Gina McCarthy:

Alyssa speaks with former head of the EPA Gina McCarthy about the future of climate and the role of prediction in policymaking. (LabXchange Version)

The Future of Energy with Dan Kammen:

Alyssa speaks with UC Berkeley's Professor of Energy Dan Kammen about climate change and the future of energy on Earth. (LabXchange Version)

Predicting Health, and Earthquakes with Susan Murphy and Brendan Meade:

Alyssa speaks with earthquake predictions expert Prof. Brendan Meade and mobile health researcher and statistician Prof. Susan Murphy. This interview looks at the power of technology in guiding humanity's future health outcomes in a variety of ways. (LabXchange Version)

The Future of Climate Prediction by Michael Foley:

Read this essay by Alyssa's teaching fellow Michael Foley on the use of models in climate science to predict the future of Earth's climate and the outcomes of human-caused climate change:

Climate change predictions have taken on an increasingly important role in national and international decision making given that the current economic and social course would lead to catastrophic warming. Given that many sectors of society contribute to climate change and the whole world will experience its impacts, such predictions must consider the domains of both physical laws and human interactions. Addressing #health, #wealth, and #earth in the shadow of climate change is a daunting task, and responses to climate change effects and predictions have ranged from aggressive mitigation to proactive or reactive adaptation.

+Brand-new Podcast Episodes coming to PredictionX.org & Spotify

List of UK Interviews Conducted by Alyssa Goodman, September 2022

David Wallom
Energy Future and Climate Mitigation
Professor of Informatics within the Department for Engineering Science at University of Oxford

Laura Van Broekhoven
Ancient Mesoamerica, Appropriation of Knowledge
Professor of Museum Studies, Ethics and Material Culture at University of Oxford

Sir David Spiegelhalter
Public Understanding of Risk, Uncertainty
Chair of the Winton Centre for Risk and Evidence Communication at University of Cambridge

Lord Martin Rees
On the Future
Emeritus Professor of Cosmology and Astrophysics at the University of Cambridge

Tim Palmer
Weather and Climate Modeling, Ensemble Modeling, Uncertainty
Royal Society Research Professor in Climate Physics, Senior Fellow at Oxford Martin Institute at University of Oxford

Richard Ovenden
Transfer of Knowledge, re:Path to Newton
Professorial Fellow and Bodley's Librarian at University of Oxford

Scott Osprey
Climate Modeling Uncertainty and Carbon Recovery
Senior Research Scientist of the Department of Physics at University of Oxford

Myles Allen
Climate Modeling Uncertainty and Carbon Recovery
Professor of Geosystem Science

Jacob Dahl
Haruspicy, Astronomy, and Gods
Professor of Assyriology

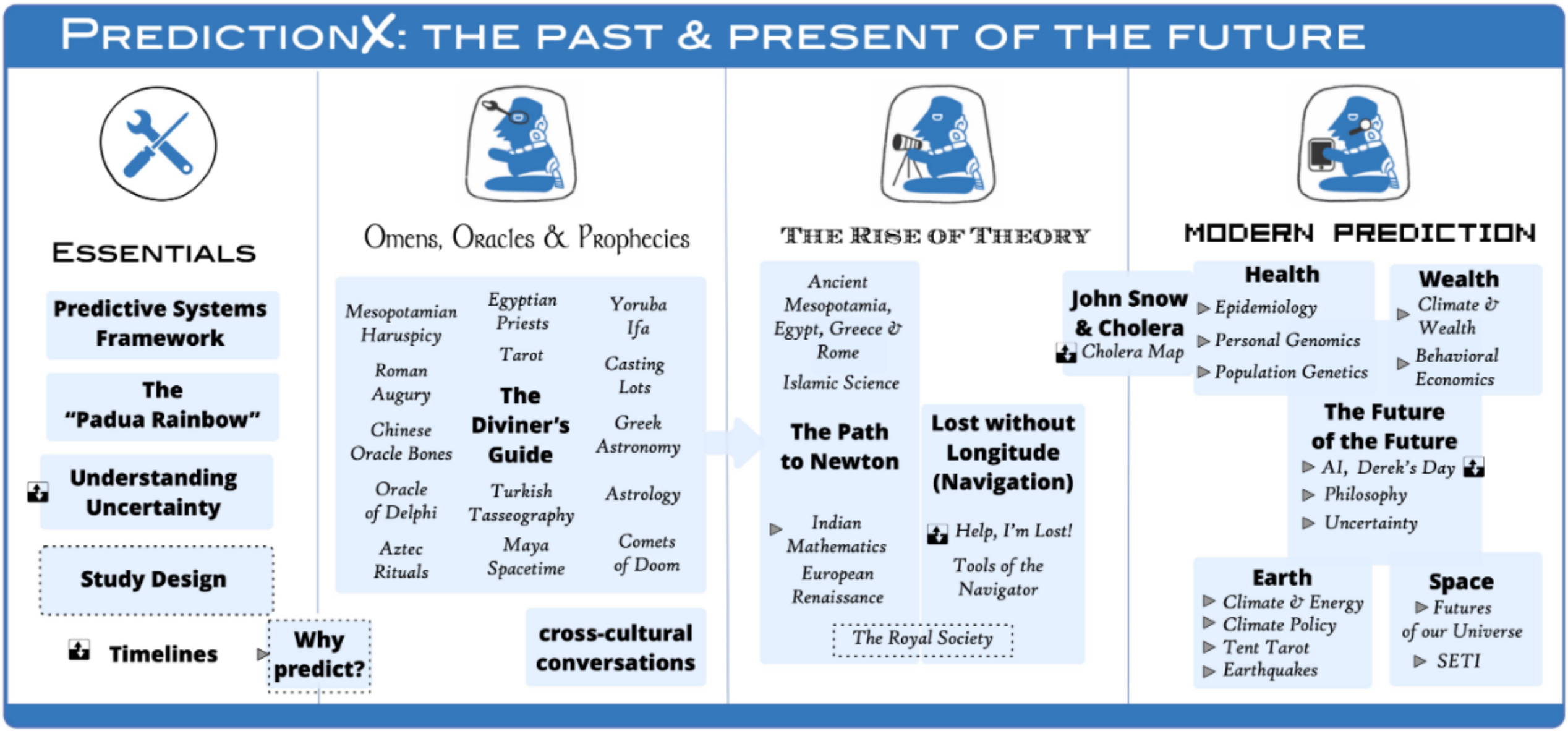
Parsa Daneshmand
Haruspicy, Astronomy, and Gods
Research Fellow at University of College London

Rob Iliffe
Isaac Newton
Professor of History of Science at Oxford, Co-Director of the Oxford Centre for the History of Science, Medicine and Technology at University of Oxford

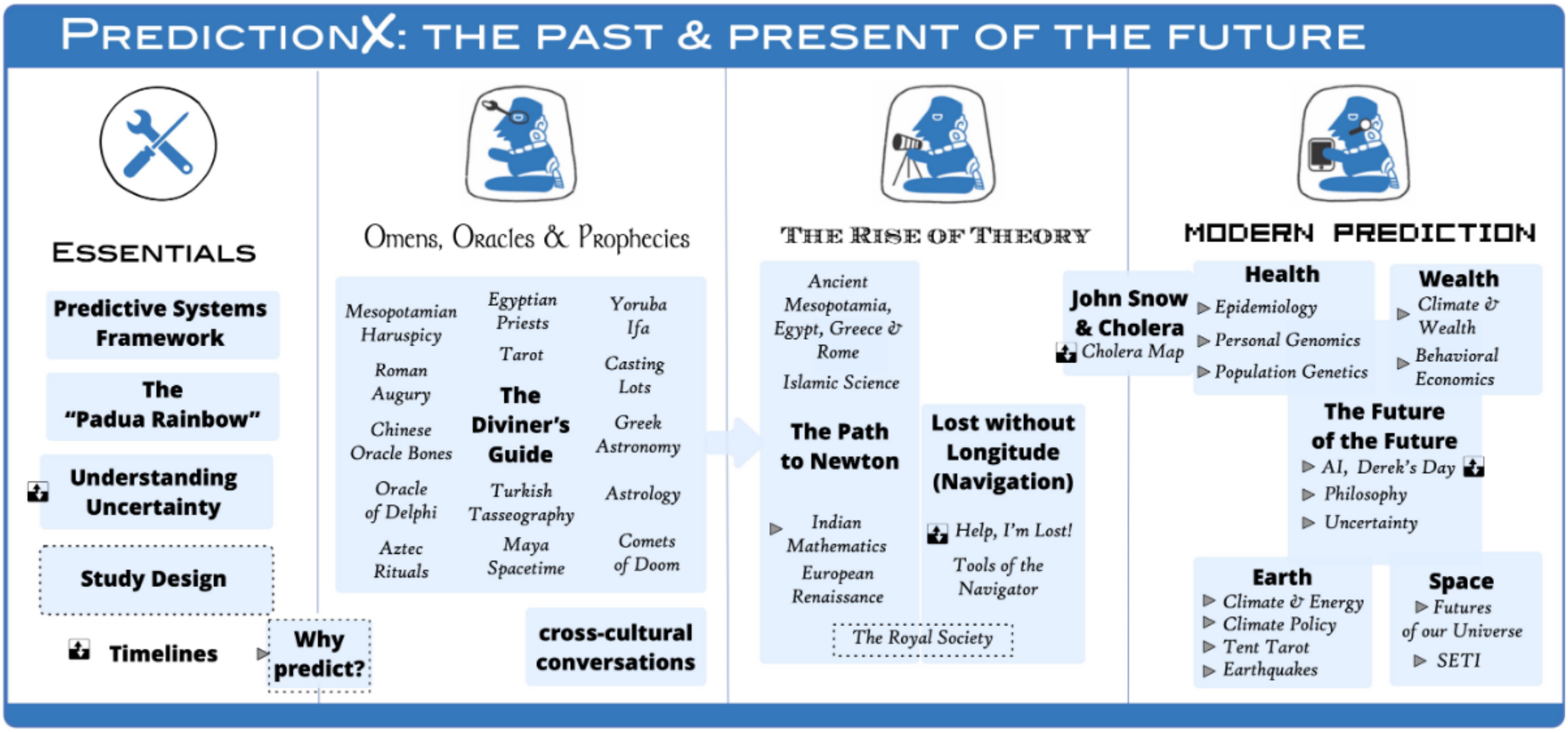
Katherine Blundell
Astrophysics and "Expectations" re:Padua Rainbow
Professor of Physics at University of Oxford

. . . stay-tuned

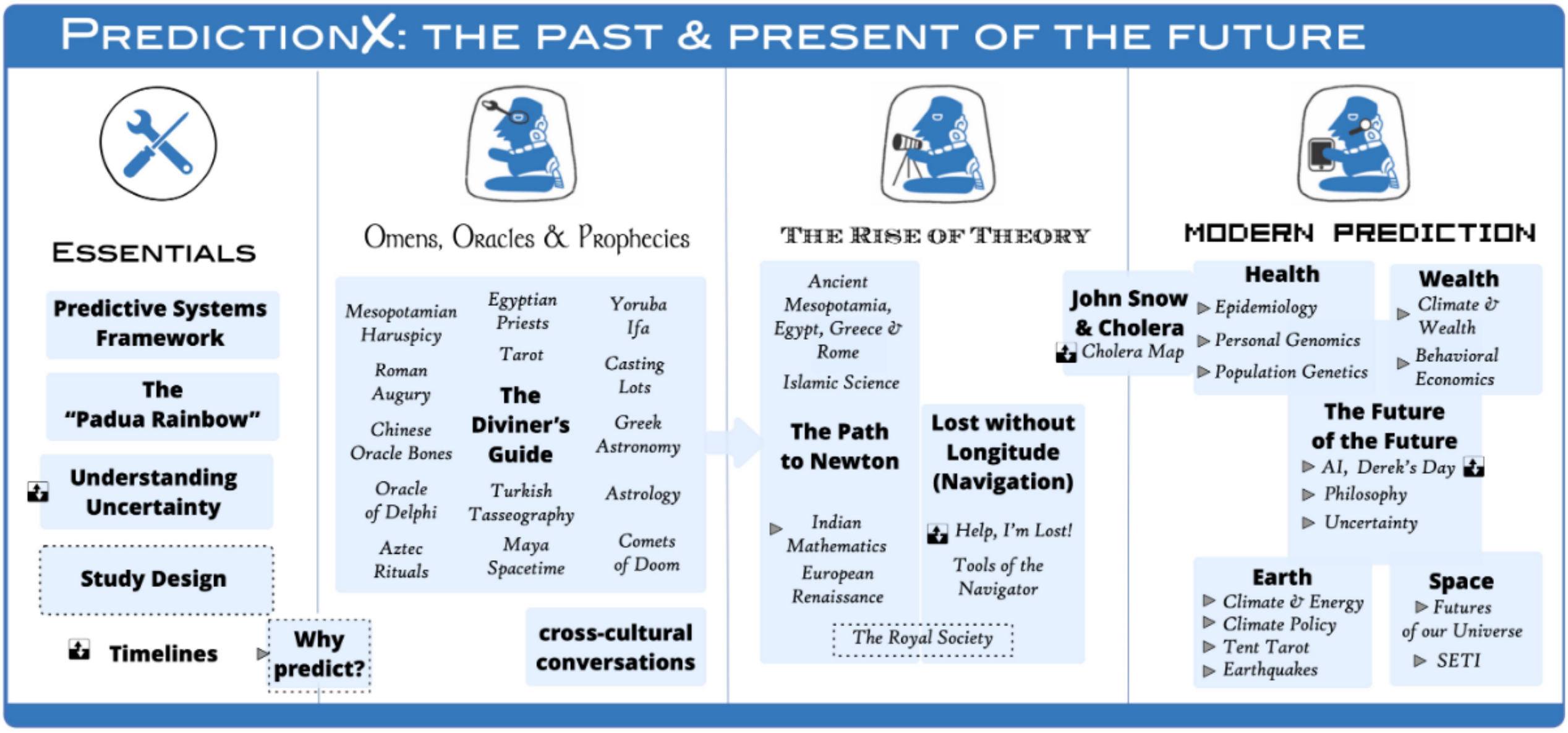
Which topics interest you most (choose up to 3)?



Which topics do you know the most about? (choose up to 4)



Which topics do you know next-to-nothing about? (choose up to 5)



Interactive Resource ▶video(s) Coming Soon visit predictionx.org for more information on the Prediction Project

What's a "Prediction"? (v1)

Prediction: Week 1

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predictionx.org [demo]

Syllabus/Canvas [demo]

edX

LabXchange

To use the Forum...

Spaces by Wix

Join “PredictionX” on Spaces by Wix

Download the app and join “PredictionX” to check out their site on the go and stay updated with the latest news, offers and more.

Enter your phone number to get a download link

US +1

Phone number

Send

Or scan to download

PredictionX: Omens, Oracles & Prophecies

HarvardX

Course

PredictionX: John Snow and the Cholera Epidemic of 1854

HarvardX

Course

PredictionX: Lost Without Longitude

HarvardX

Course

Favorite Share ...

The Path to Newton on LabXchange

1 Favorite • 23 Views • 1 Clone

An experience where the interactive Path to Newton website is enriched with other web resources from The Prediction Project and Crash Course videos.

Uploaded February 10, 2022

Subject
Physics

Language
English

Background Knowledge
None

License
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PREDICTIONX

This content is from **The Prediction Project**.

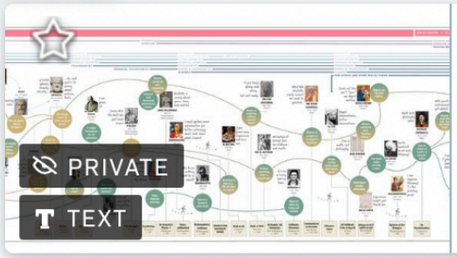
View website

View Profile

LabXchange™
Science and learning–connected.

Start pathway

1



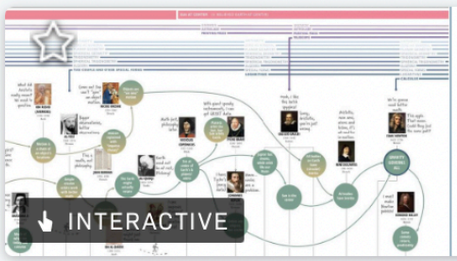
Welcome!

Alyssa Goodman

Thanks for visiting the Path to Newton here on LabXchange.

14 Views • 2 Remixes

2



The Path to Newton (an online Interactive Exploration)

The Prediction Project

This interactive timeline explores the philosophical and mathematical conceptions of the Universe and of how and why objects move on Earth, in...

6 Favorites • 350 Views • 4 Remixes

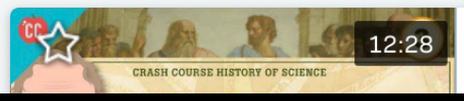
3

The Presocratics: Crash Course History of Science #2

CrashCourse

Just when did humans start thinking they COULD explain the physical world? Who did that, when, and why? ... Let's just say it was an obsession with so...

2 Views • 2 Remixes



Plato and Aristotle: Crash Course History of Science #3

Prediction: Week 1

Who is Alyssa?	Where did this course come from?	Who are you? Poll
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predictionx.org demo	Syllabus/Canvas demo	edX demo	LabXchange demo
Why predict?	**Framework for Predictive Systems**	**Padua Rainbow**
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take-a-sweater demo	uncertainty (tables)	uncertainty (full group)
Your future in GenEd1112	Prediction Journals	Final Project Thoughts
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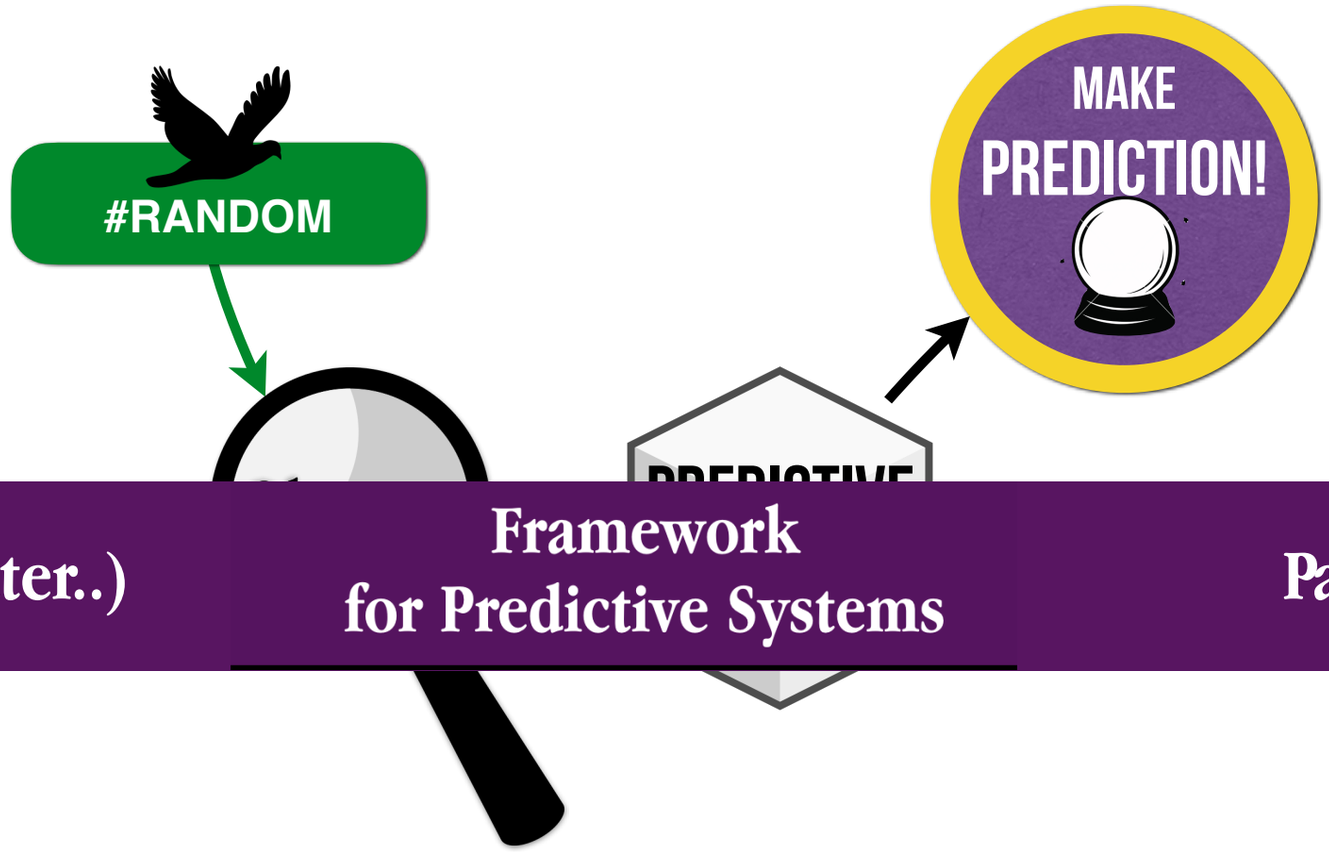
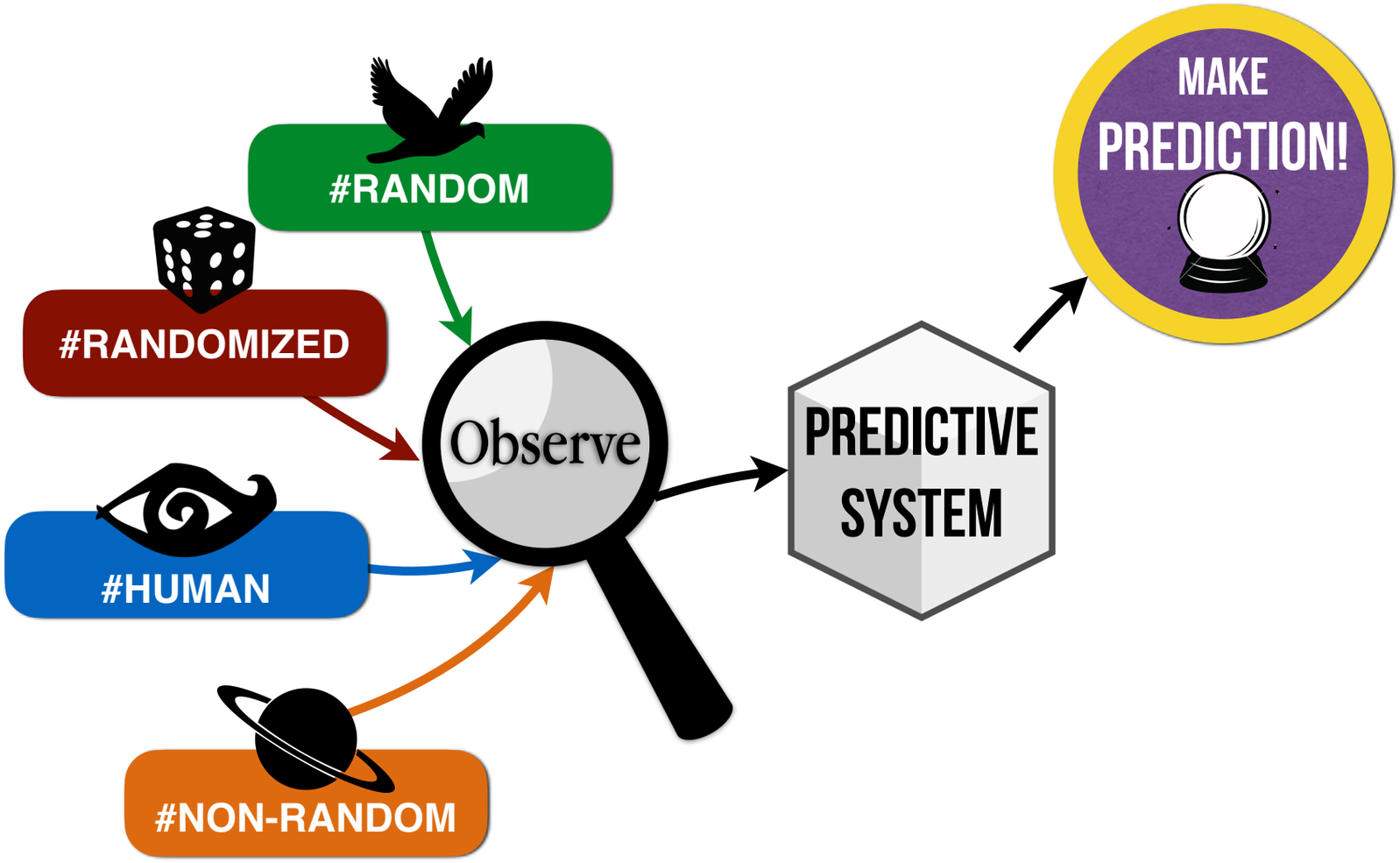


Why predict? (later..)

Framework
for Predictive Systems

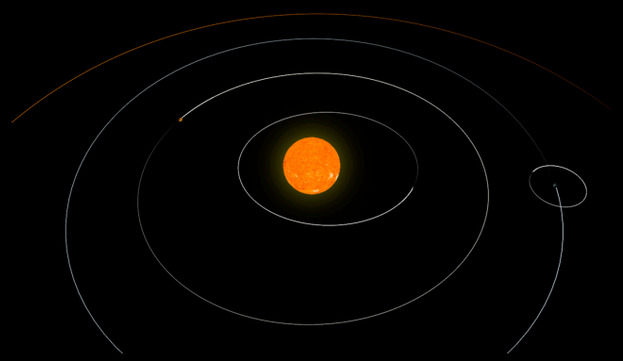
Padua Rainbow

https://openclipart.org/



https://openclipart.org/

#NON-RANDOM



Celestial Motion

#RANDOMIZED

Ifa

#HUMAN

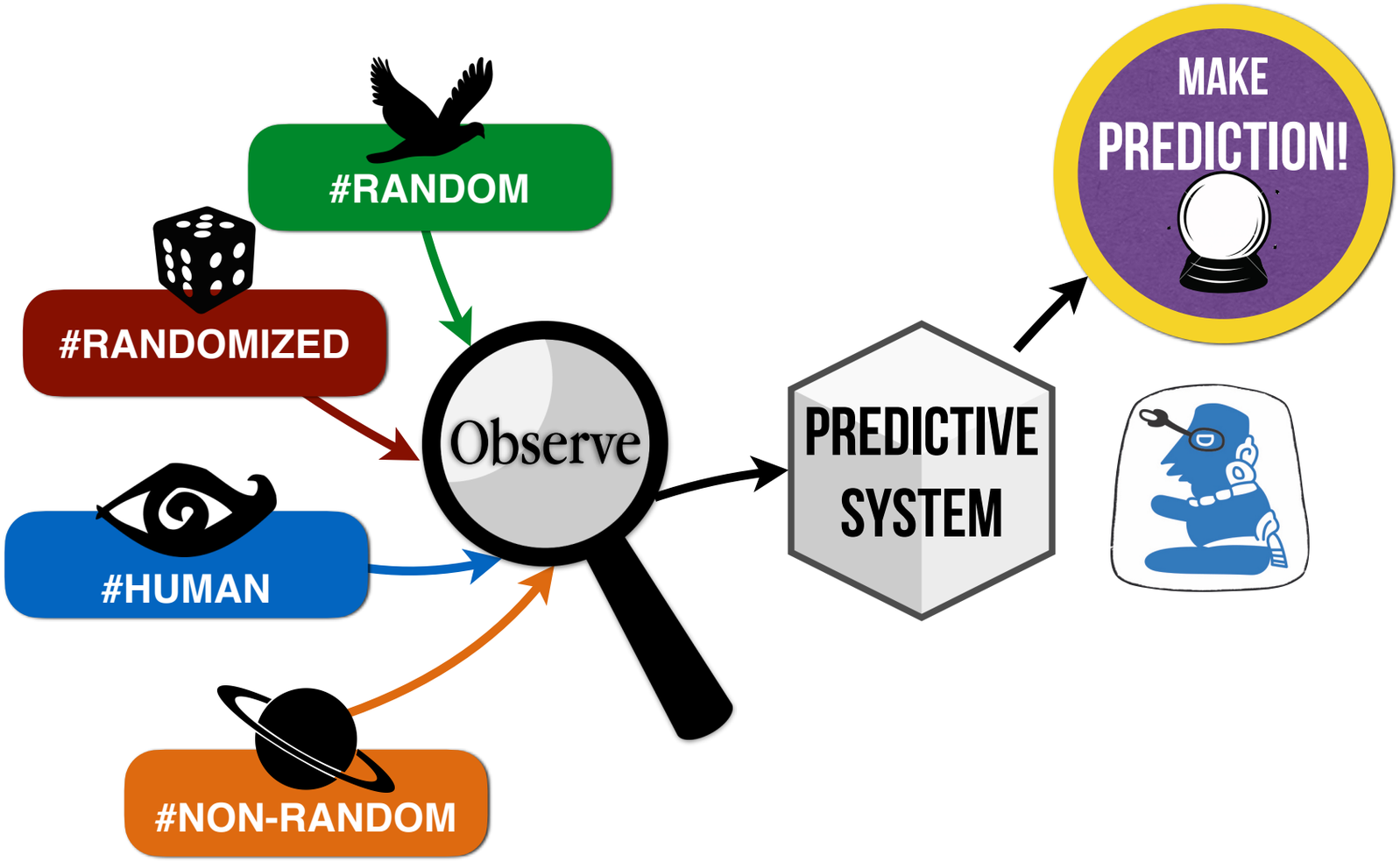
Egyptian “Bobble Head”

#RANDOM

Comets of Doom

#HUMAN

Ancient Egyptian Divination, featuring Prof. Peter der Manuelian (Director of Harvard's Semitic Museum)



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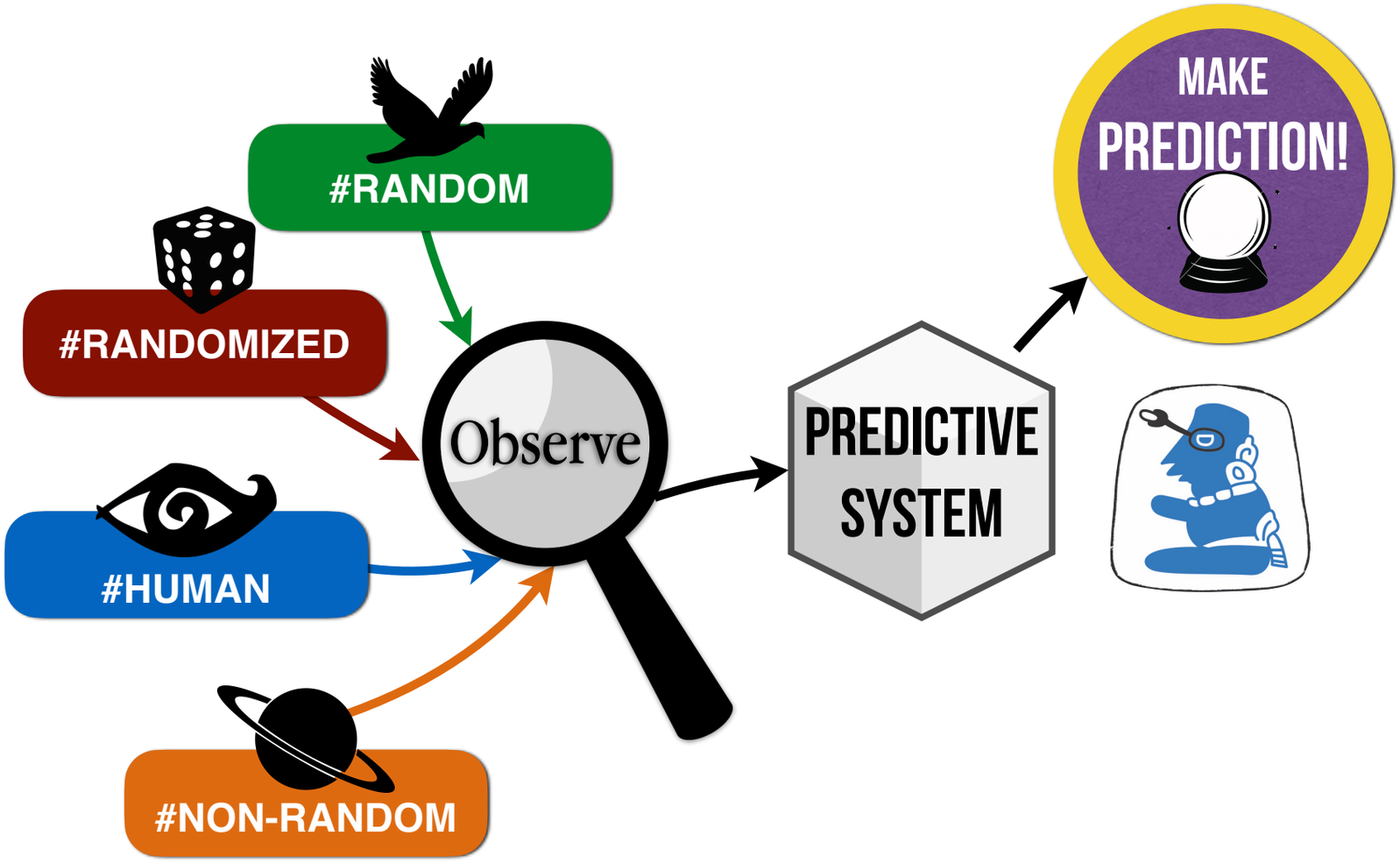

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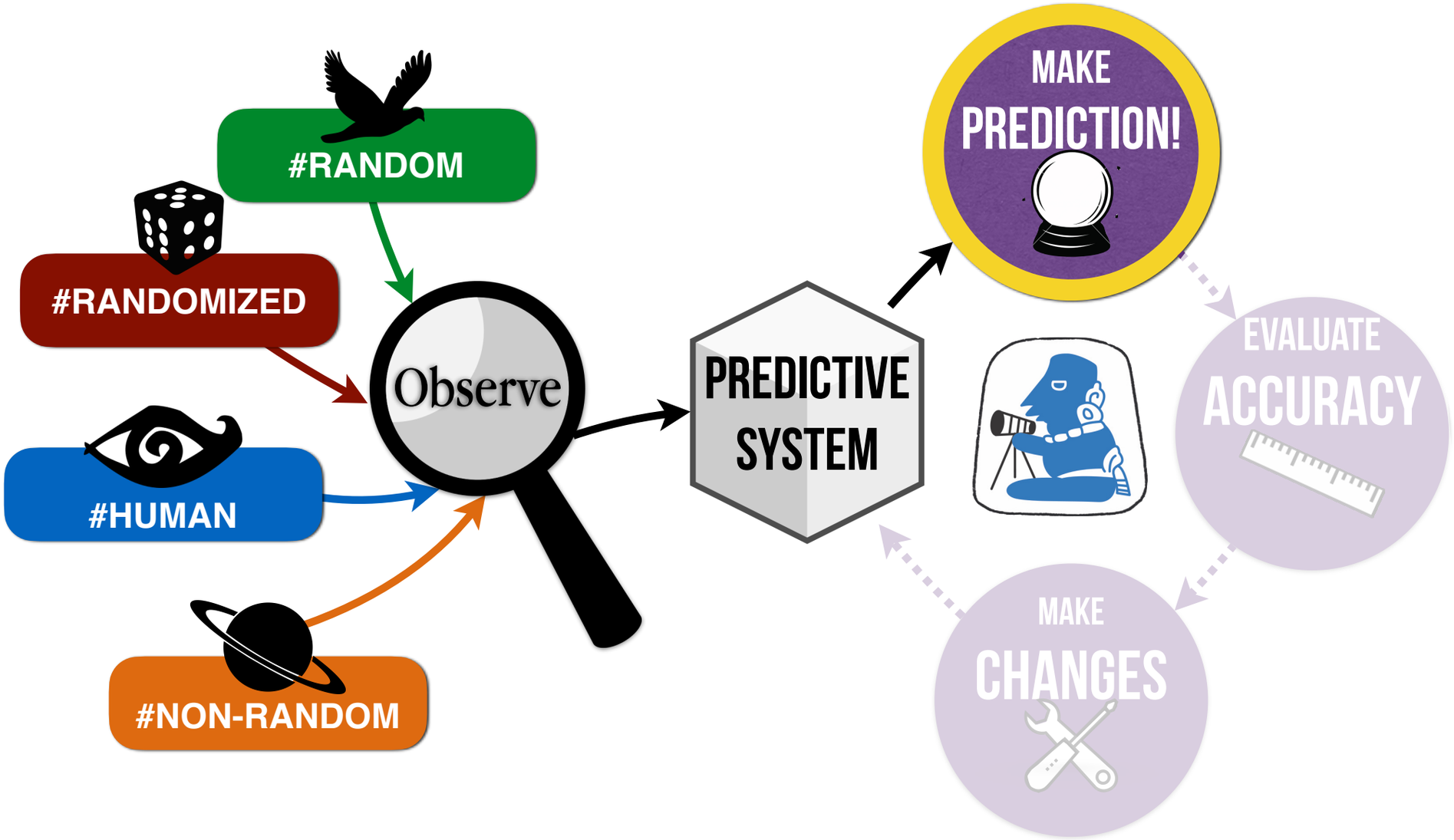

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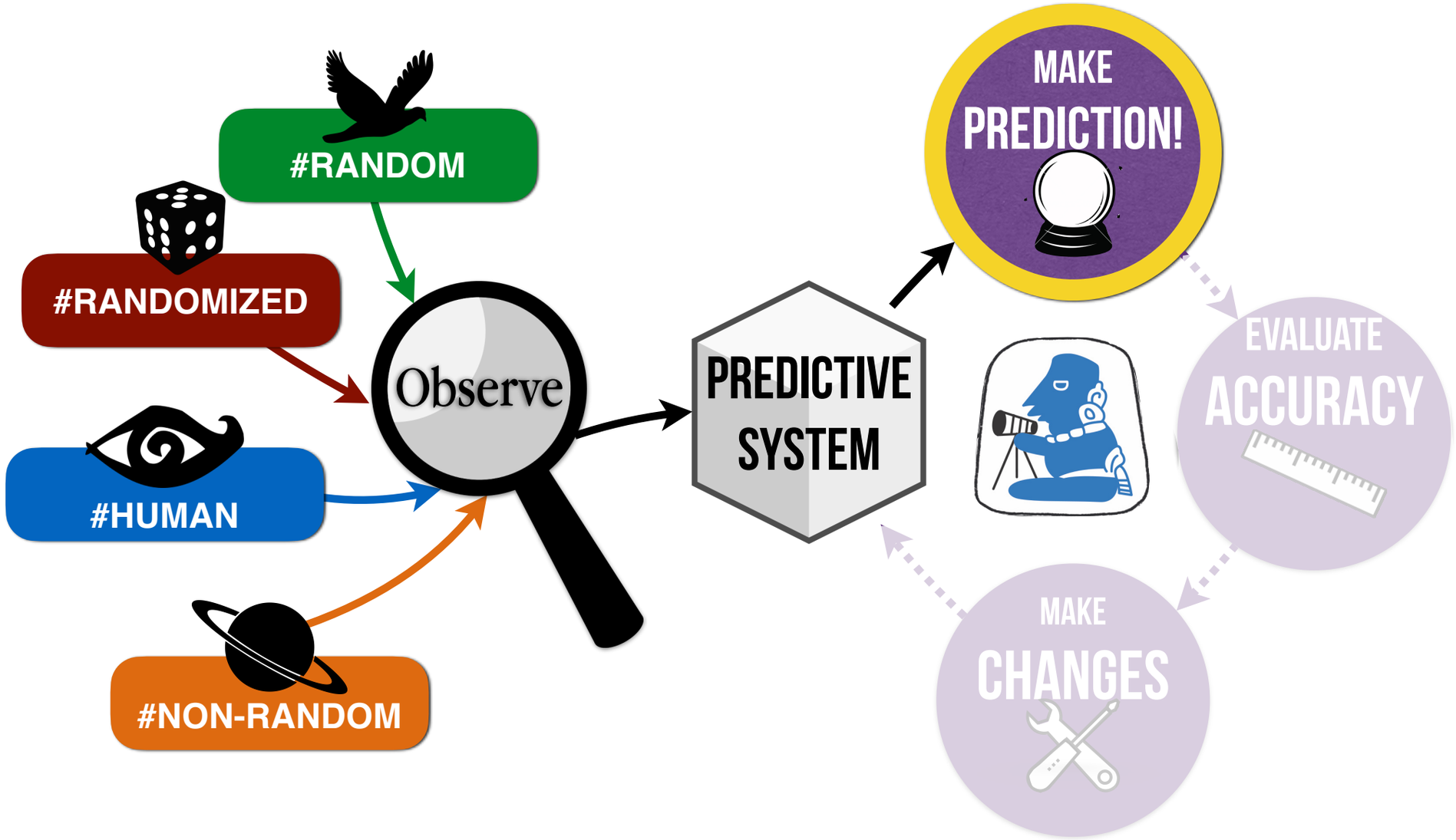

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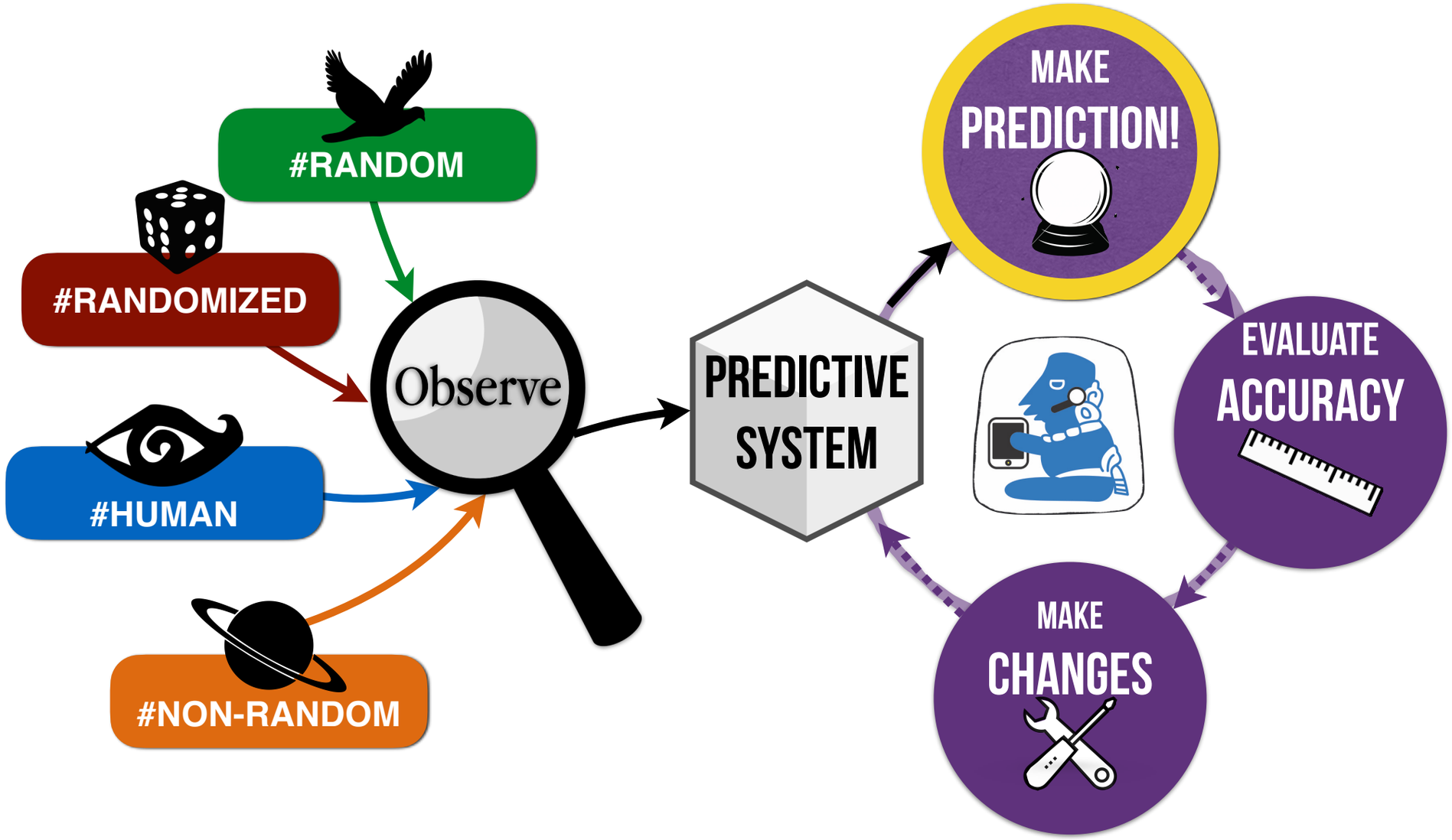

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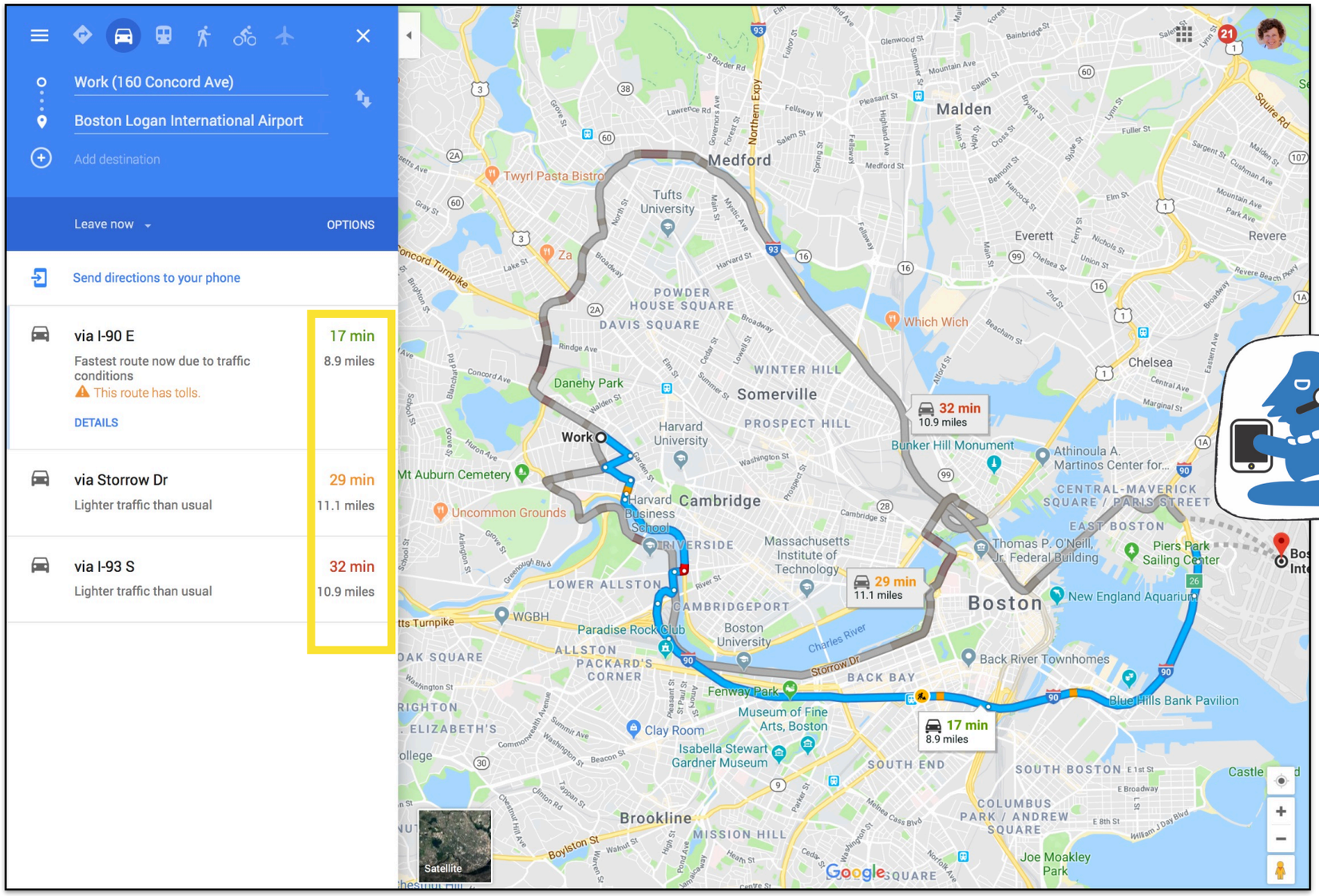

“Most companies who do live traffic **compare** their predictions against actual time in traffic to tune their algorithms and data sources.
The likely result of this is that the companies who have access to the best usage data … are likely to end up with the best predictions in the medium to long term.”

Forbes Tech, July 2013

What's a "Prediction"? (V2)

Time for snacks.

Feel free to dance.

Please also listen to the words...

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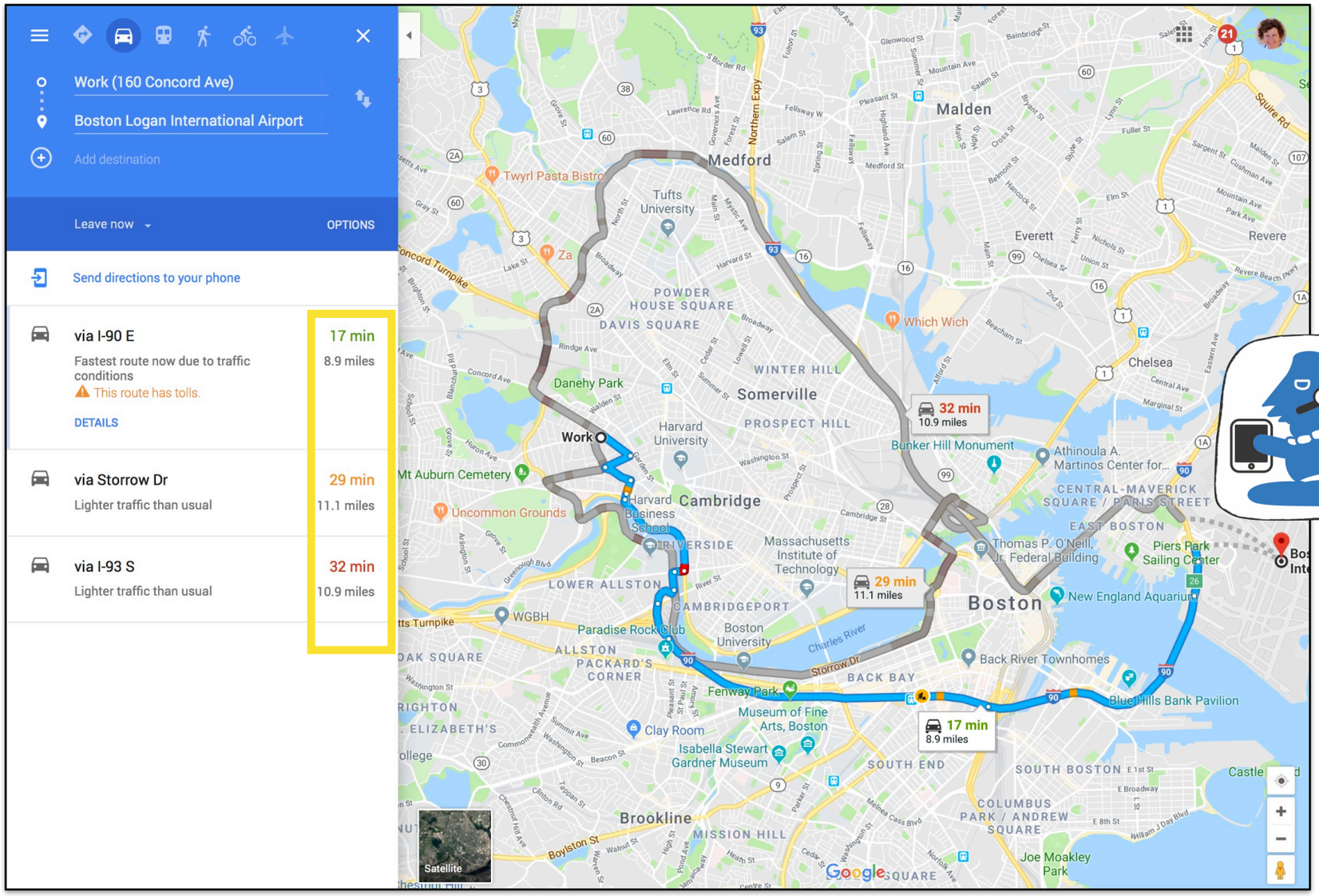

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Forbes Tech, July 2013


T-Mobile... 4:16 PM 97%
Via dei Fori Imperiali, 1
Colosseum
4 min
5 min
6 min
Hotel Duca D'Alb
Cavour
Via Giovann
4 min
Basilica di San Pietro in Vincoli
Domus Aurea
Parco Del Colle Oppio
6 min
Arco di Costantino
Ristorante Pizz
4 min (1.1 km)
Fastest route, despite the usual traffic


T-Mobile... 4:16 PM 97%
Via dei Fori Imperiali, 1
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Arco di Costantino
Ristorante Pizz
4 min (1.1 km)
Fastest route, despite the usual traffic
T-Mobile... 4:18 PM 93%
worldwidetelescope.org
Sign In
Collections >
1 of 8
New VAMP Feeds
Constellations
Planet Size
Pisces
60:00:00
Look At
Actual
Large
SolarSystem
Imagery
3D Solar System View
T-Mobile... 4:19 PM 91%
louvre.fr
LOUVRE
PLAN YOUR VISIT
Models of divinatory livers
Models of divinatory livers
© 2007 RMN / Franck Raux
Missions & Organization
Louvre Lens
App St... 4:15 PM 98%
IFA Black APP
BASIC DIVINATION
THE 5 BASIC POSITIONS
ALAFIA
YES
EJIFE
YES
ETAWA
MAYBE
OKANRAN
NO
OYEKU
NO
No Service 12:33 PM 100%
Boston, MA
30
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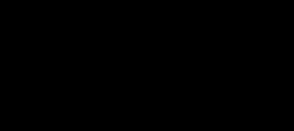
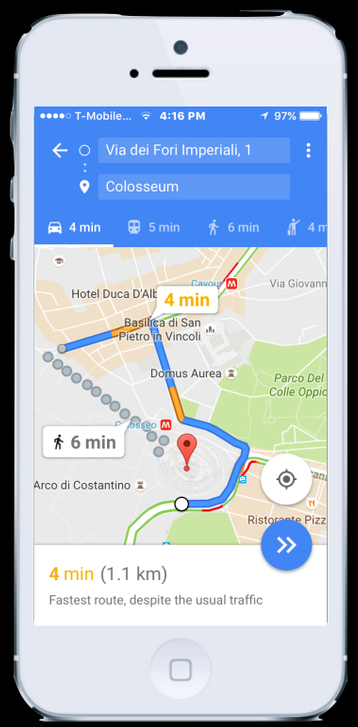
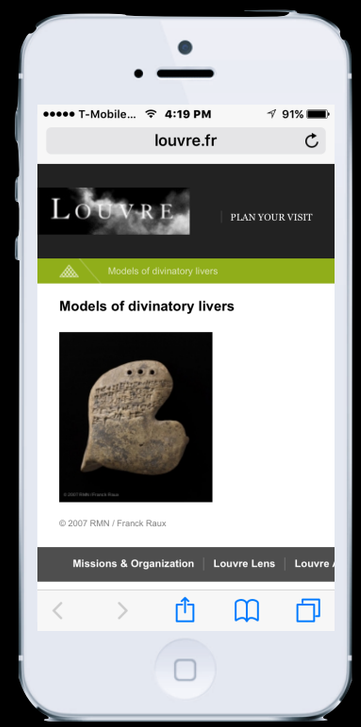
Fri
Sat
Settings
How To
Credits
App St... 7:44 AM 61%
Stockaster
Apple Inc. (AAPL)
Analysis
Ratings
News
Info
Historical
Median
Upper
Lower
$125.00
$120.00
$115.00
$110.00
$105.00
$100.00
$95.00
Aug 1
Sep 1
Oct 1
Nov 1
Dec 1
Quote
Oct 03
@12:00pm
+/-
Volume
29,590,254
29,741,186
+0.51%

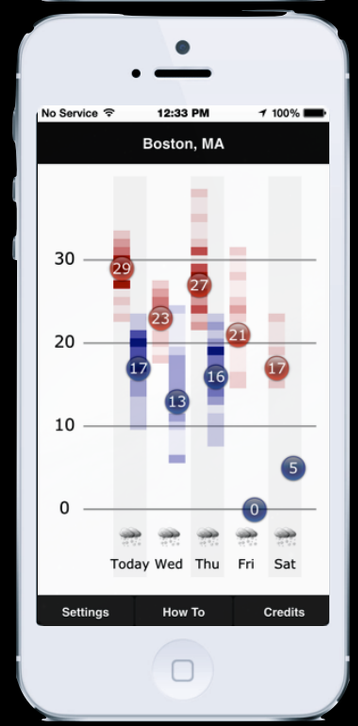
EVALUATE

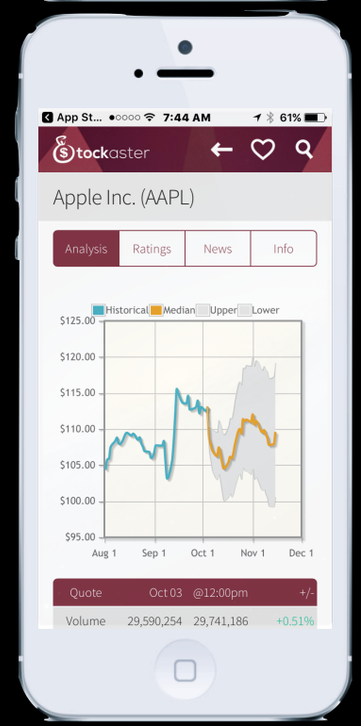
ACCURACY



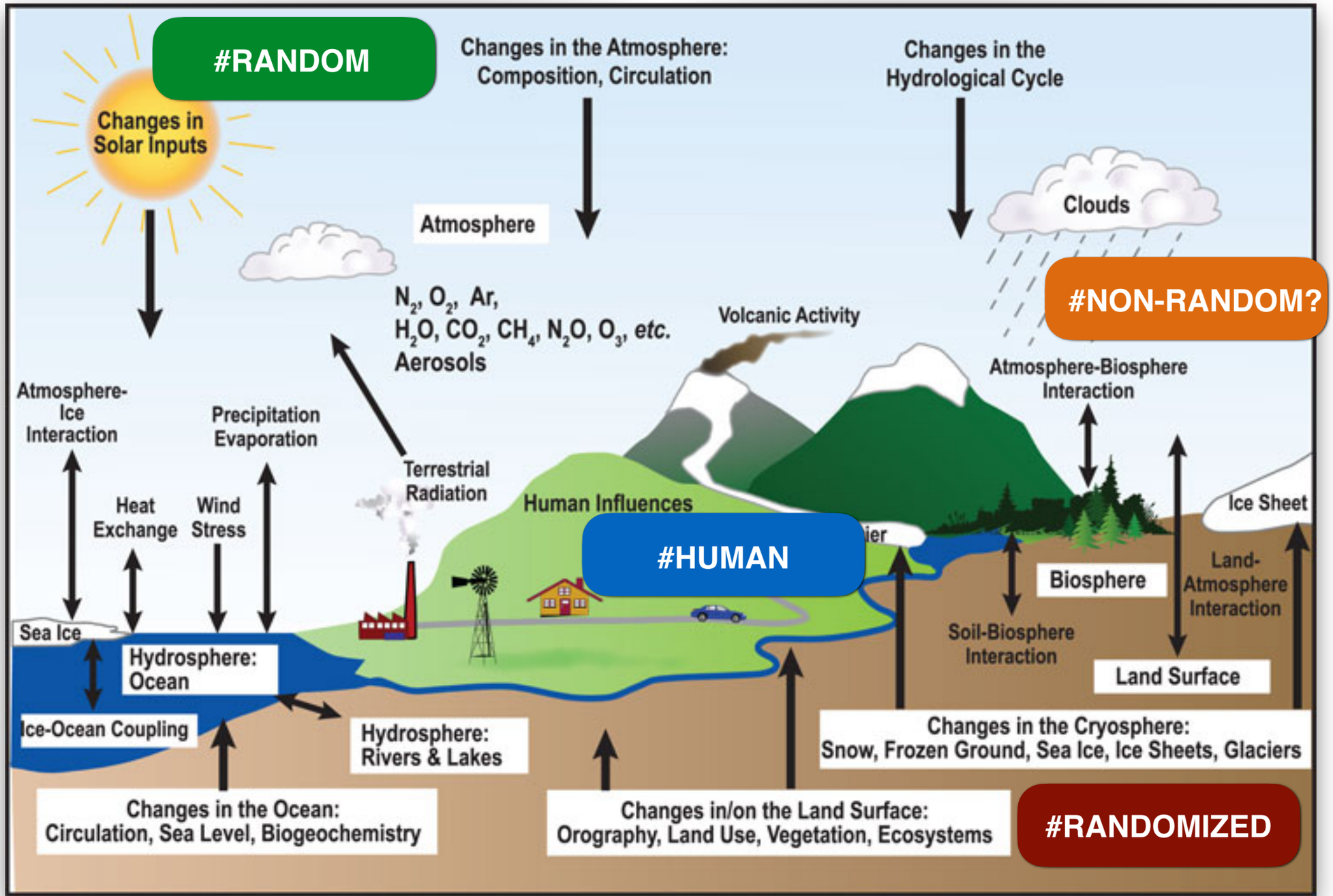








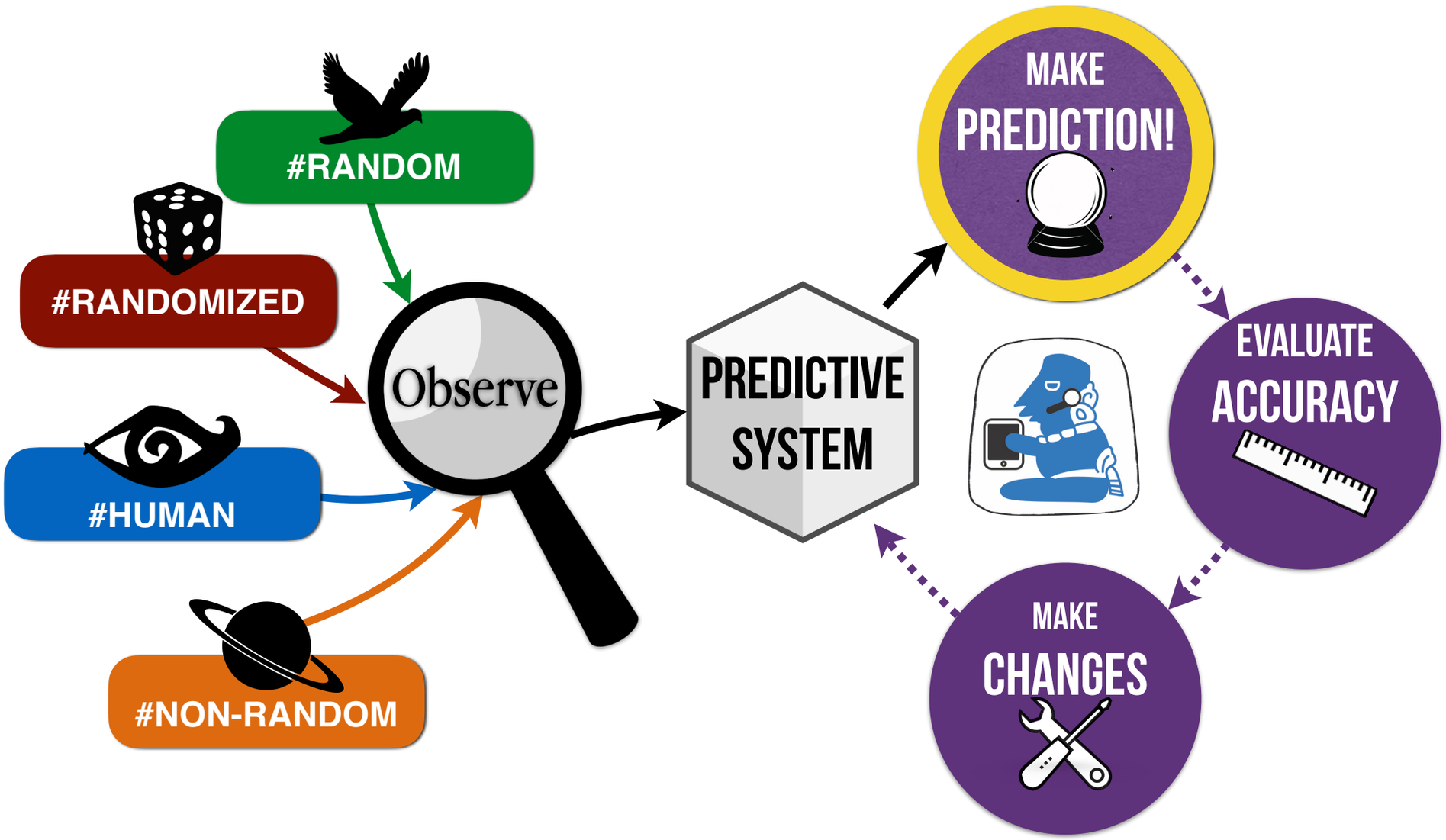
EVALUATE ACCURACY



blogs.scientificamerican.com/the-curious-wavefunction/are-more-accurate-climate-change-models-worse

Why predict?

Framework for Predictive Systems



https://openclipart.org/

Why predict?

How well *can* we know?

Do we really *want* to know?

Do we *already* know?

How well *can* we know?

SLIDE-THE- PUCK KNOW-HOW

1. Use full screen

2. How to Play:

1. Decide how rough your table is

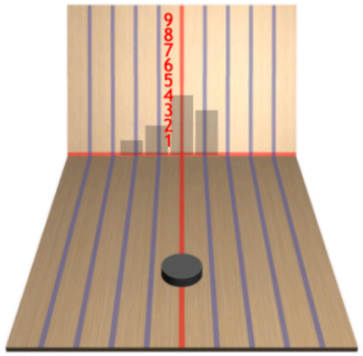
The lower the number, the more rough your table will be and the more the puck will veer off course.

2. Choose the number of games and pucks by clicking anywhere on the grid

3. Click the blue link to finish the game and have all the boxes automatically filled in.

3. Understanding Your Results

THE BOARD

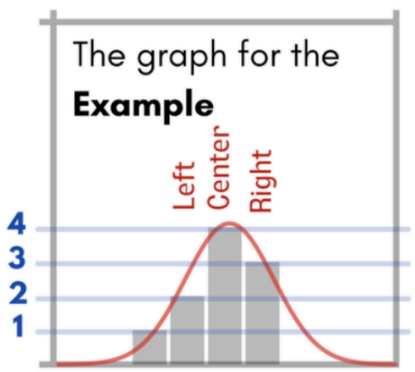


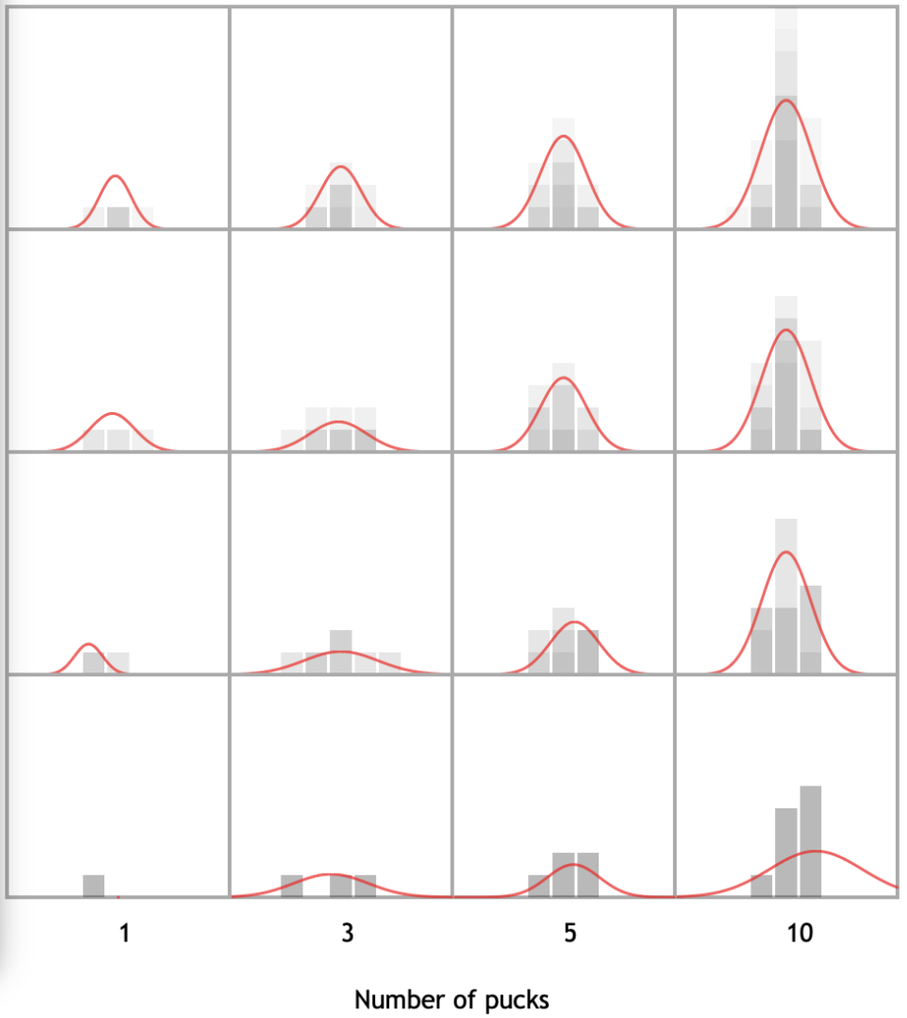
Example: The puck hit the board 4 times at the center, 3 times to the right of the center, and 2 times to the left of the center

THE GRAPH

The y-axis is the number of times a puck hit that position and the x-axis is the position of the puck.

Example: The puck hit the board 4 times at the center, 3 times to the right of the center, and 2 times to the left of the center





predictionx.org/introduction-to-uncertainty

Do we really *want* to know?

Cengiz Cemaloglu, Turkish Coffee Ground Divination, Radcliffe 2016

PredictionX: The Past & Present of the Future

Essentials

Predictive Systems Framework

The "Padua Rainbow"

Understanding Uncertainty

Study Design

Timelines

Why predict?

Omens, Oracles & Prophecies

Mesopotamian Haruspicy

Egyptian Priests

Yoruba Ifa

Tarot

Roman Augury

Casting Lots

The Diviner's Guide

Chinese Oracle Bones

Greek Astronomy

Oracle of Delphi

Turkish Tasseography

Astrology

Aztec Rituals

Maya Spacetime

Comets of Doom

cross-cultural conversations

The Rise of Theory

Ancient Mesopotamia, Egypt, Greece & Rome

Islamic Science

The Path to Newton

Indian Mathematics

European Renaissance

The Royal Society

Lost without Longitude (Navigation)

Help, I'm Lost!

Tools of the Navigator

Modern Prediction

John Snow & Cholera

Cholera Map

Health

- *Epidemiology*
- *Personal Genomics*
- *Population Genetics*

Wealth

- *Climate & Wealth*
- *Behavioral Economics*

The Future of the Future

- *AI, Derek's Day*
- *Philosophy*
- *Uncertainty*

Earth

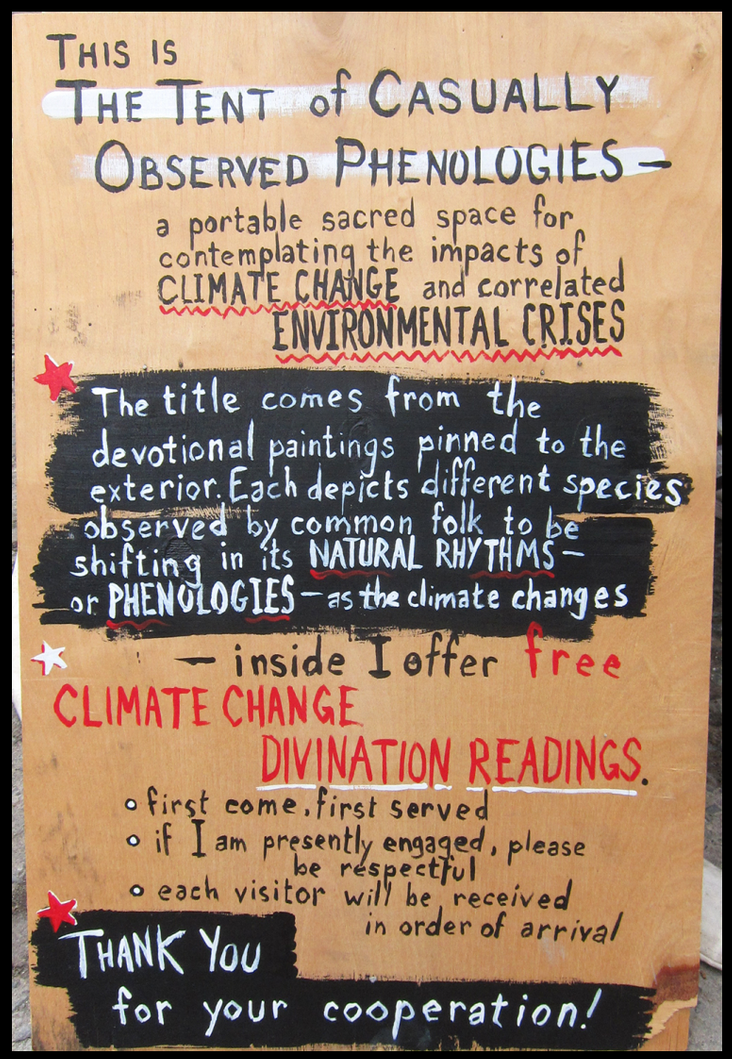
- *Climate & Energy*
- *Climate Policy*
- *Tent Tarot*
- *Earthquakes*

Space

- *Futures of our Universe*
- *SETI*

Interactive Resource ▶video(s) Coming Soon visit predictionx.org for more information on the Prediction Project

Do we *already* know?

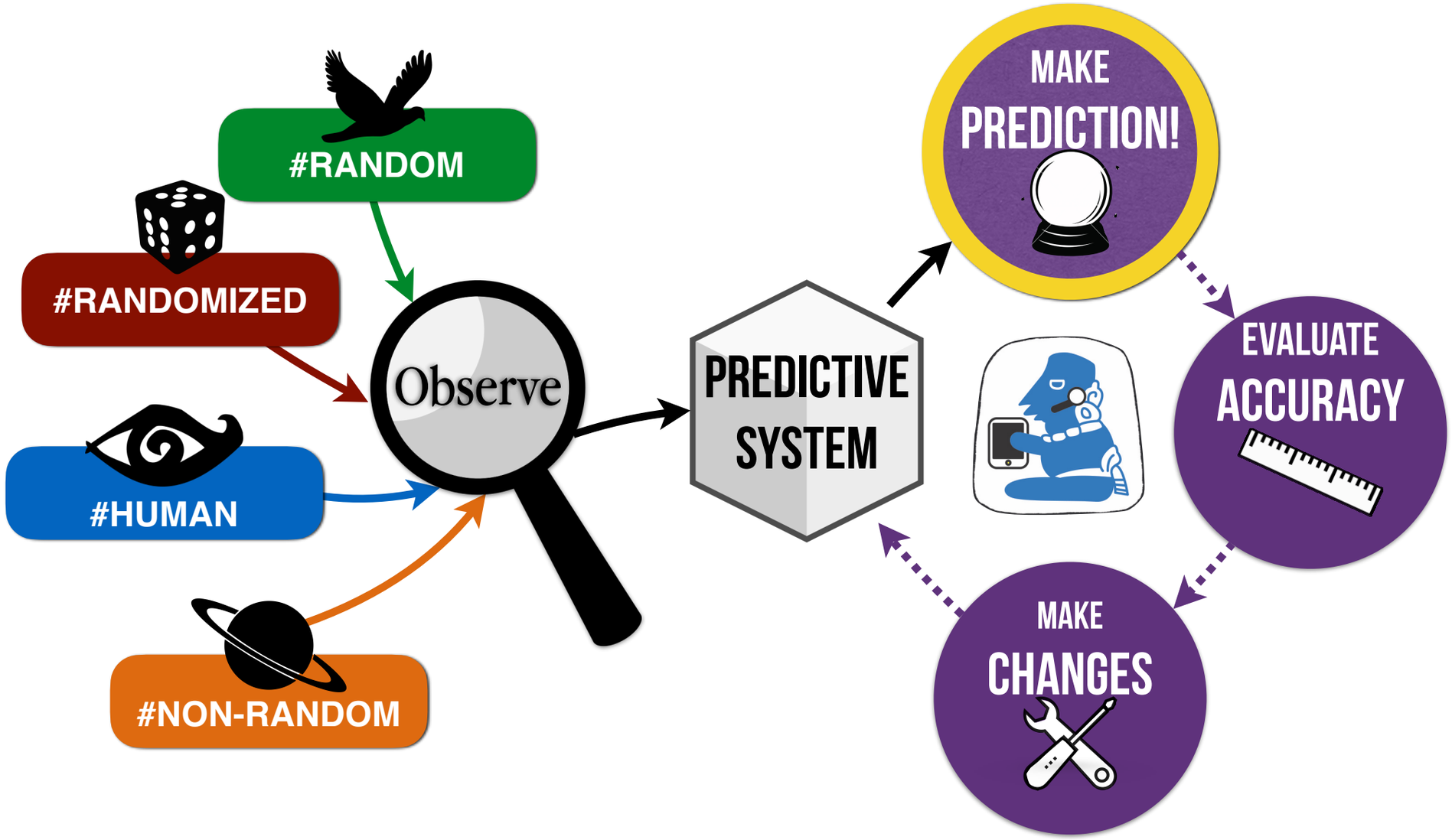


The Tent of Casually Observed Phenologies
Climate Change Divination by James Leonard, Harvard 2015

Why predict?

Framework for Predictive Systems

Padua Rainbow



https://openclipart.org/

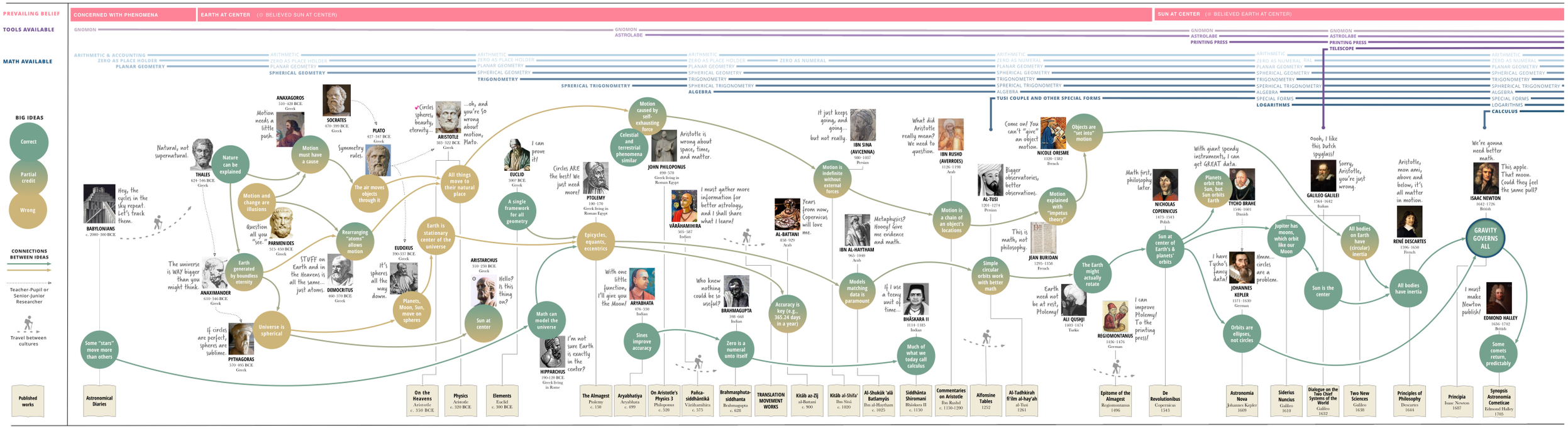
PREDICTIVE SYSTEMS

Padua Rainbow

Phenomenon	Observation*	Data	Rule	Theory	Explanation	Prediction

The Path to Newton

PREDICTIONX



or, Experiment

The FUTURE of the Future

20th century

How good is Chat GPT at Prediction?

Prediction: Week 1

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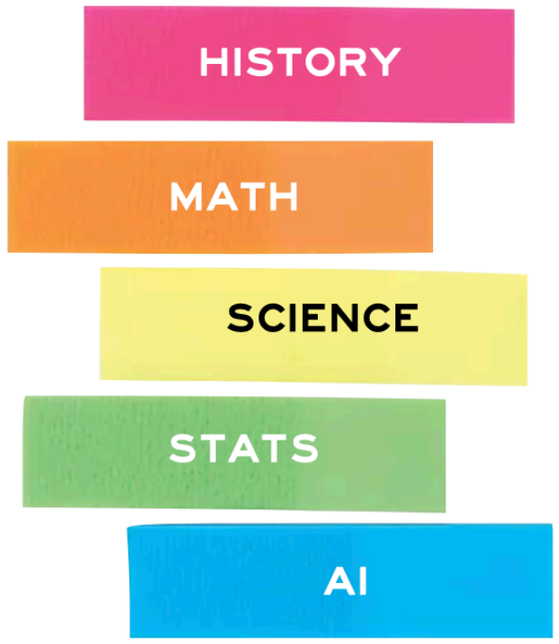
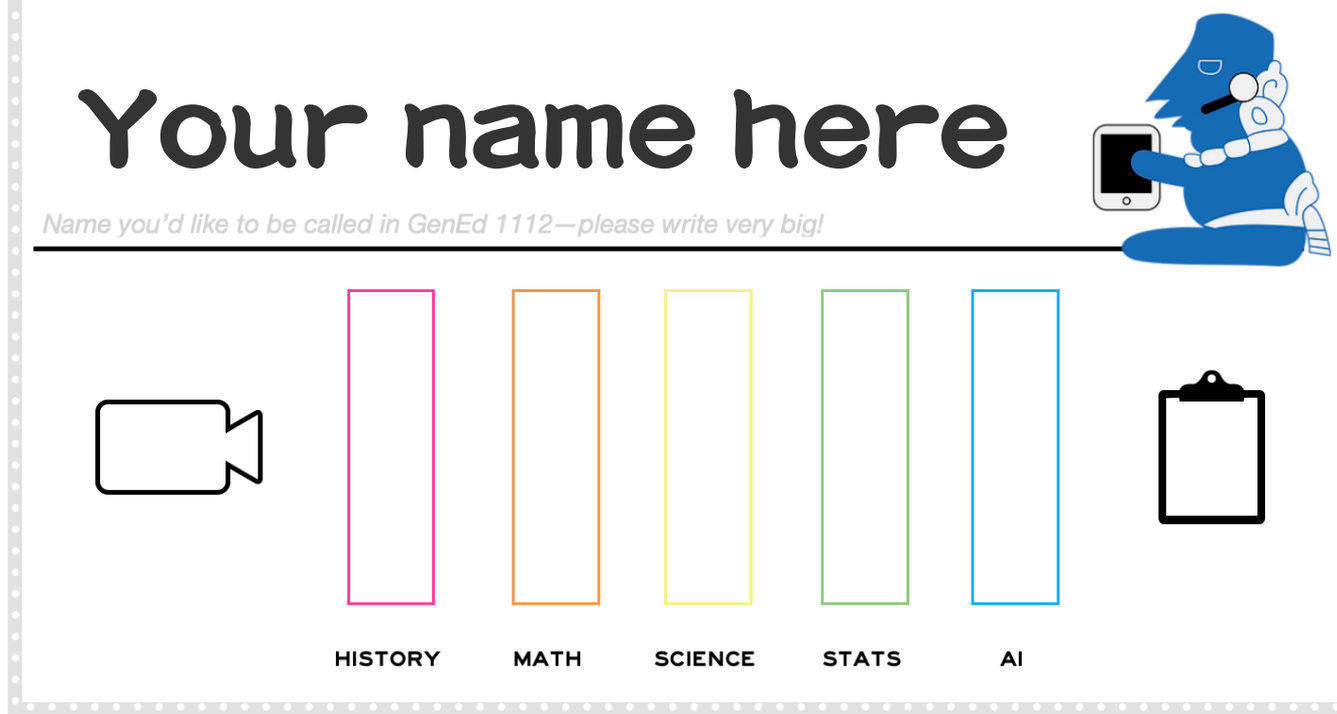
Describe elements of how weather prediction works... (vote others' ideas up/down)

Top

***Instructions**: on the other side of this tent card, place colored flags in appropriate boxes for all topics you already love. Shade in either of the icons (video or writing), if you are familiar with creating and posting videos online, and/or if you are great at creating clear and concise Google Docs. This side of the card is only for your reference while the reverse faces others.*



Disussions



The “Correct” Answer

Weather forecasting

Weather forecasting is the application of current technology and science to predict the state of the atmosphere for a future time and a given location.

Weather forecasts are made by collecting as much data as possible about the current state of the atmosphere (particularly the temperature, humidity and wind) and using understanding of atmospheric processes (through meteorology) to determine how the atmosphere evolves in the future.

However, the chaotic nature of the atmosphere and incomplete understanding of the processes mean that forecasts become less accurate as the range of the forecast increases.

Traditional observations made at the surface of atmospheric pressure, temperature, wind speed, wind direction, humidity, precipitation are collected routinely from trained observers, automatic weather stations or buoys.

During the data assimilation process, information gained from the observations is used in conjunction with a numerical model's most recent forecast for the time that observations were made to produce the meteorological analysis.

Numerical weather prediction models are computer simulations of the atmosphere.

They take the analysis as the starting point and evolve the state of the atmosphere forward in time using understanding of physics and fluid dynamics.

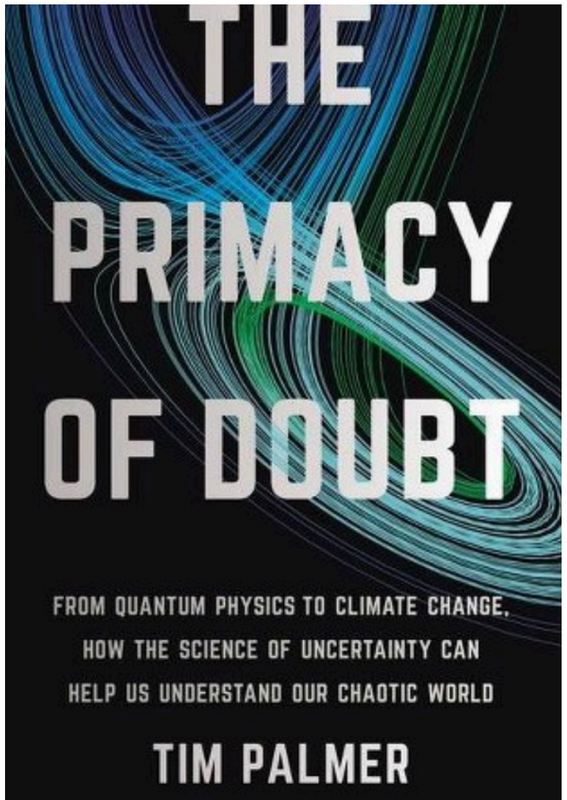
The complicated equations which govern how the state of a fluid changes with time require supercomputers to solve them.

The output from the model provides the basis of the weather forecast.

Note: The above text is excerpted from the Wikipedia article "Weather forecasting", which has been released under the GNU Free Documentation License.

sciencedaily.com/terms/weather_forecasting.htm

More is to come…



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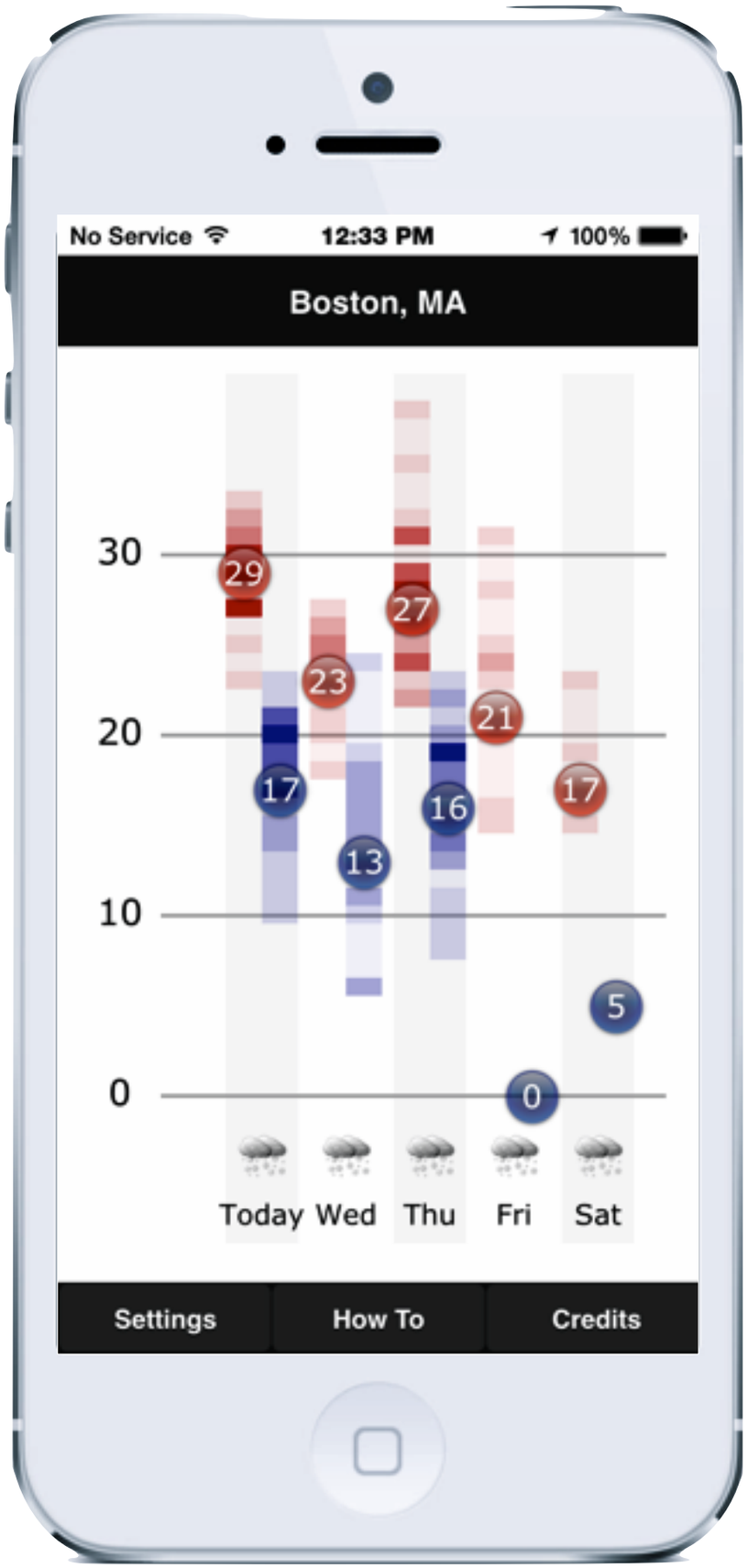
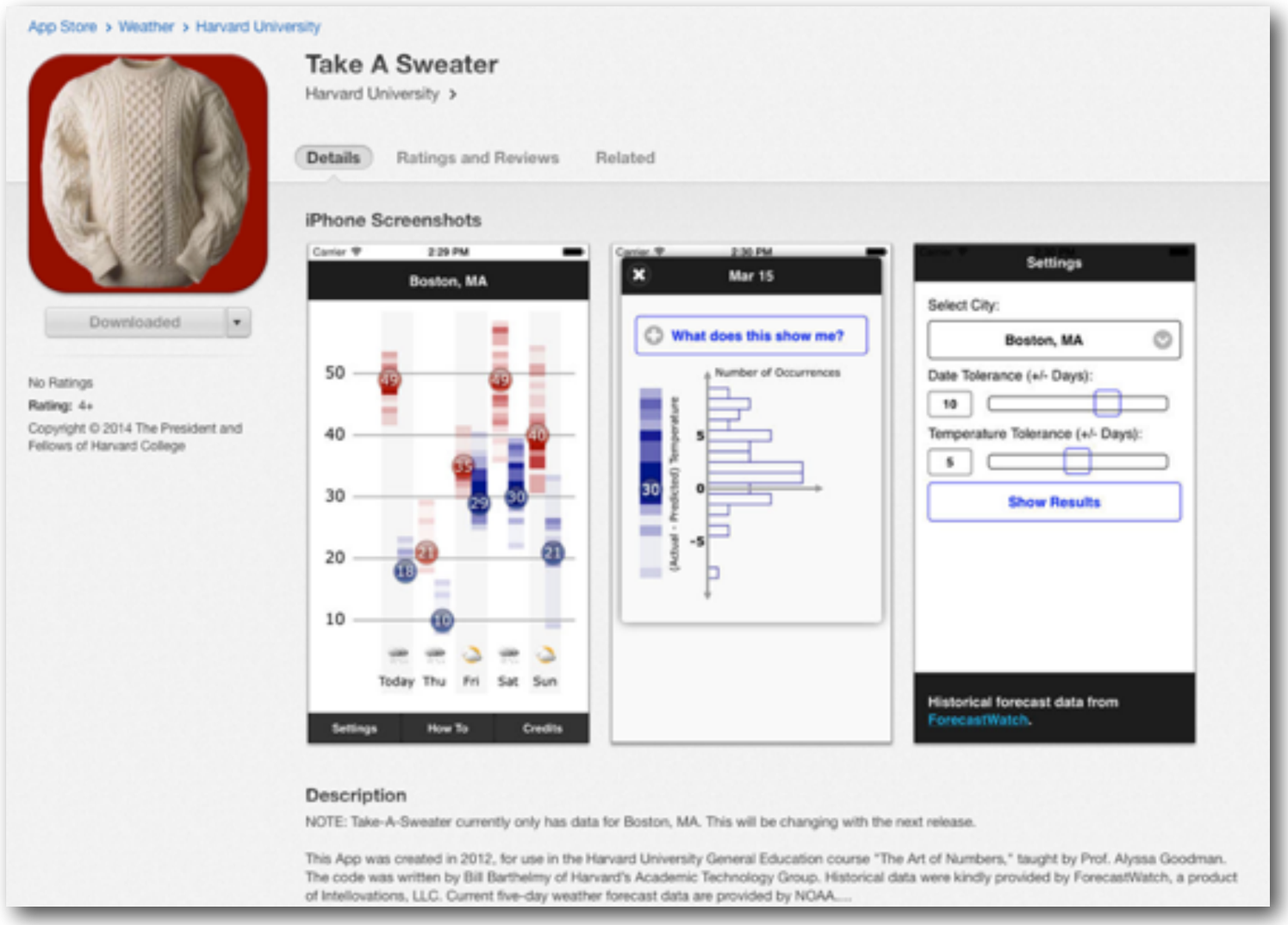
"Take A Sweater"





takeasweater.com, and "TakeASweater" in the Apple App Store

with thanks to Eric **Floehr** of Forecast Watch and Bill **Barthelmy** of HUIT Academic Technology at FAS

Prediction: Week 1

Who is Alyssa?

Where did this course come from?

Who are you?
Poll

Uncertainty

How does uncertainty manifest in predictions in your own experience?

Weather is a fine example. (Feel free to look again at takeasweater.com)

COVID is another.

Your long-term future, and the Earth's are also good. Detailed topics are totally up to you.

In your discussions, please consider how, and how well, uncertainty is measured in the particular kind of system(s) you discuss, and note those ideas down here when your group session is nearly over.

Reply

CANVAS

take-a-sweater
demo

uncertainty
(Breakouts)

uncertainty
(full group)

Your future in GenEd1112

Prediction Journals

Final Project Thoughts

What's a *prediction*?
survey

Breakout
discussions

full class
discussion

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MATERIALS AND ACCESS

Books for GenEd 1112

Amazon and/or publisher links are below, but all books should also be at the Harvard Coop, using this convenient link.

Required

1--The Signal and the Noise: Why So Many Predictions Fail-but Some Don't, by Nate Silver [read online]

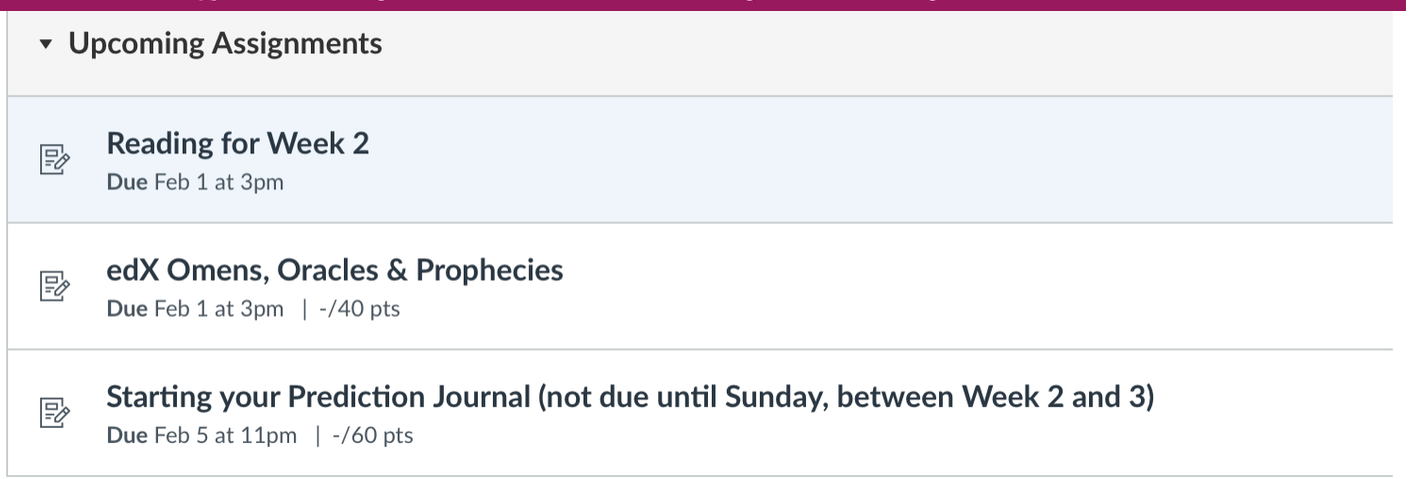
2--To Explain the World, the Discovery of Modern Science, by Stephen Weinberg [read online]

Recommended

Specific chapters or sections of some, but not all, of these works will be suggested or assigned, often with a link to read online for free. NO need to purchase these–this list is mostly just for students' reference.

1. Climate of Hope: How Cities, Businesses, and Citizens Can Save the Planet, by Michael Bloomberg & Carl Pope [read online] (re:Modern Prediction)
2. The House of Wisdom: How Arabic Science Saved Ancient Knowledge and Gave Us the Renaissance, by Jim Al-Khalili [not yet available online] (re:Data to Theory)
3. Prediction Machines, by Ajay Agrawal, Joshua Gans, & Avi Goldfarb [read online] (re:Modern Prediction)
4. The Knowledge Machine, by Michael Strevens [not yet available online, search only here] (re:Data to Theory, and Modern Prediction)
5. On The Future, by Martin Rees [read online] (re:Modern Prediction)
6. Thinking Fast, and Slow, by Daniel Kahneman [read online] (re:Human Behavior)
7. The Primacy of Doubt: From Quantum Physics to Climate Change, How the Science of Uncertainty Can Help Us Understand Our Chaotic World, by Tim Palmer [not yet available online] (re:Modern Prediction)
8. The Map of Knowldege, by Violet Moeller [not yet available online] (re:Data to Theory)
9. The Swerve: How the World Became Modern, by Stephen Greenblatt [read online, 1 hour at a time] (re:Data to Theory)
10. The Ministry for the Future, by Kim Stanley Robinson (a view of a climate-change dominated future) (re:Modern Prediction)
11. The Light Ages: The Surprising Story of Medieval Science, by Seb Falk (re:Data to

Read Chapter 1 of "The Pursuit of Destiny" next week's class



CANVAS

ASSIGNMENTS , GRADING PROCEDURES & ATTENDANCE

Credit awarded, in "units" not related to percentages, is proportional to the difficulty of assignments. Weekly **homework** requests, including incremental additions to Journals: **~100** units. The **Prediction Journal** (**400** units) plus **Final Project** (**600** units) will determine about the same fraction of your course grade as all other homework assignments combined. Class/section **participation** (including **Forum** posts): **~250** units total. Please take note that a grade such as "140 out 150," while 87%, is not an "87" or a B+, it's just 140 points toward your total in the class when you could have had 150. Your grade for the full course will be calculated "on a curve" using point totals. Students who do very well will receive a flavor of A, and if the class does very well overall, there will (should!) be many As. If you put full effort into the class and complete all assignments effectively, you can expect a B or better. Missing class or section, especially more than once, will impact your participation grade, so please let your TF know in advance if you'll need to miss anything, and we will try to arrange a way for you to make up what you miss. So, in summary, *all students who attend class, participate fully, make good use of section time and office hours, and create a meaningful Prediction Journal and Final Predictive System Project should be able to receive a good grade.*

My Prediction Journal

Will be made for you by the teaching staff under the "Collaboration" Tab on Canvas (soon, thanks HUIT)

1st post is requested in "Assignments," for Next Week

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Final Project

Read about the final project on Canvas/Syllabus for now, or ask if you have questions—we'll ask you to start thinking about that in a few weeks.
options are: 1) agreed-upon research question; or
2) a new predictive system.

Prediction: Week 1

Who is Alyssa?	Where did this course come from?	Who are you? Poll
What's the course about? (overview diagram)	What do you think/know about Prediction? Poll	
predictionx.org demo	Syllabus/Canvas demo	edX demo	LabXchange demo
Why predict?	Framework for Predictive Systems	Padua Rainbow
How do weather forecasts work? survey	Breakout discussions	full class discussion
take-a-sweater demo	uncertainty (tables)	uncertainty (full group)
Your future in GenEd1112	Prediction Journals	Final Project Thoughts
What's a *prediction*? survey	Breakout discussions	full class discussion

What's a Prediction?

(motivational discussion questions from the GenEd 1112 syllabus)

What's a Prediction? (Discussion)

Most people will say "prediction" has something to do with the future--but questions linger.

1. How far is this "future"?
2. Is testability required?
3. Is a prediction always part of a decision?
4. How is a decision different from a prediction?
5. Who really knows and doesn't know the future?
6. Why do we want to know?
7. How can we know?
8. How does prediction manifest in your everyday life? In society? Today? In the past? In the future?

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Reply

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What questions do you have about GenEd 1112? (note that you can upvote others' too)

Top

The SHEEP of DESTINY

He SMILES because he sees your future.

And Oh, how HAPPY shall that future be!