NOW:

TIME

http://getwallpapers.com/wallpaper/full/f/8/c/573277.jpg

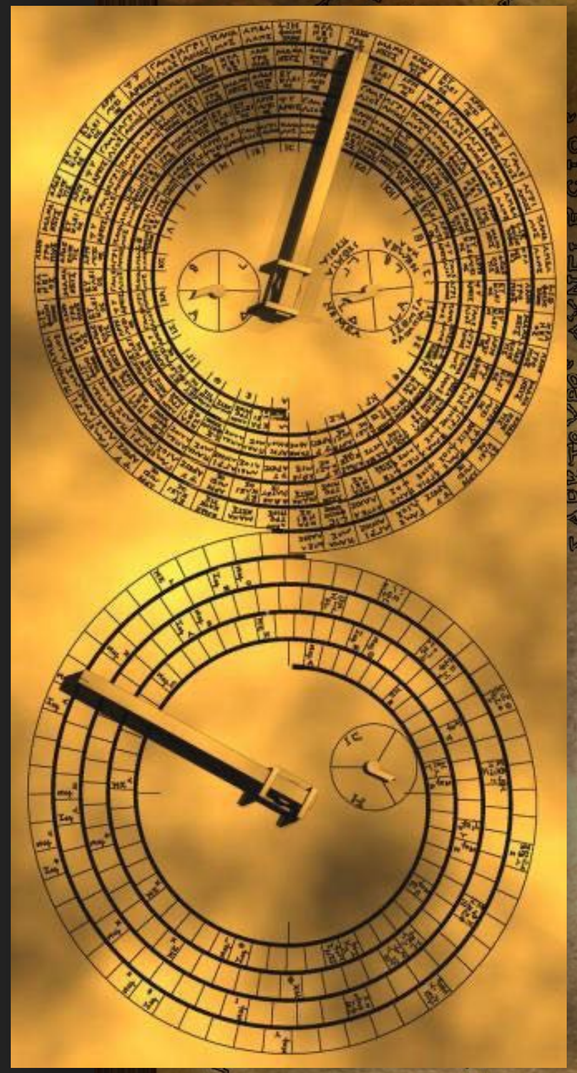
Syllabus

http://getwallpapers.com/wallpaper/full/f/8/c/573277.jpg

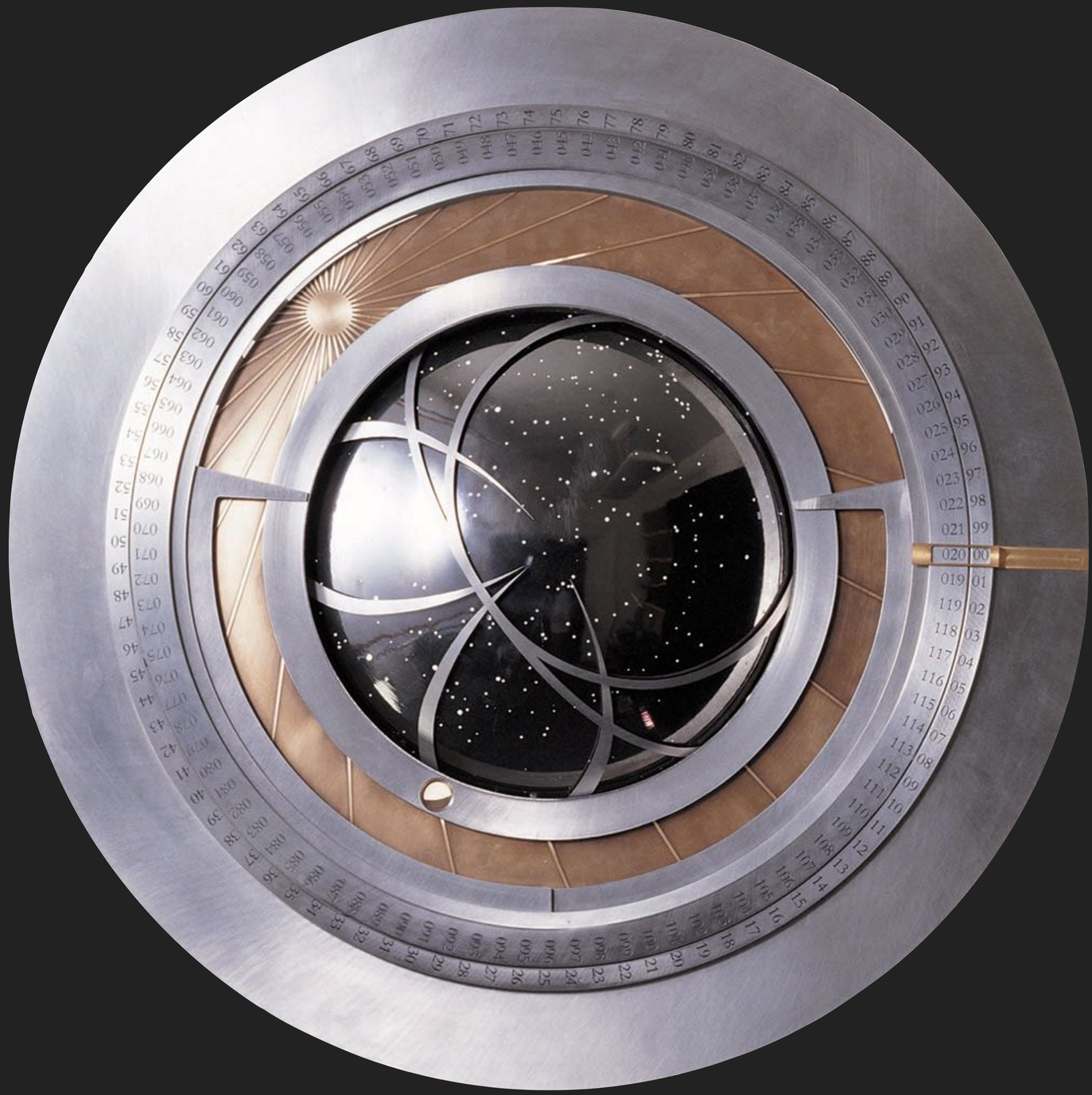
https://en.wikipedia.org/

ANTIKYTHERA MECHANISM

~100BCE



BACK



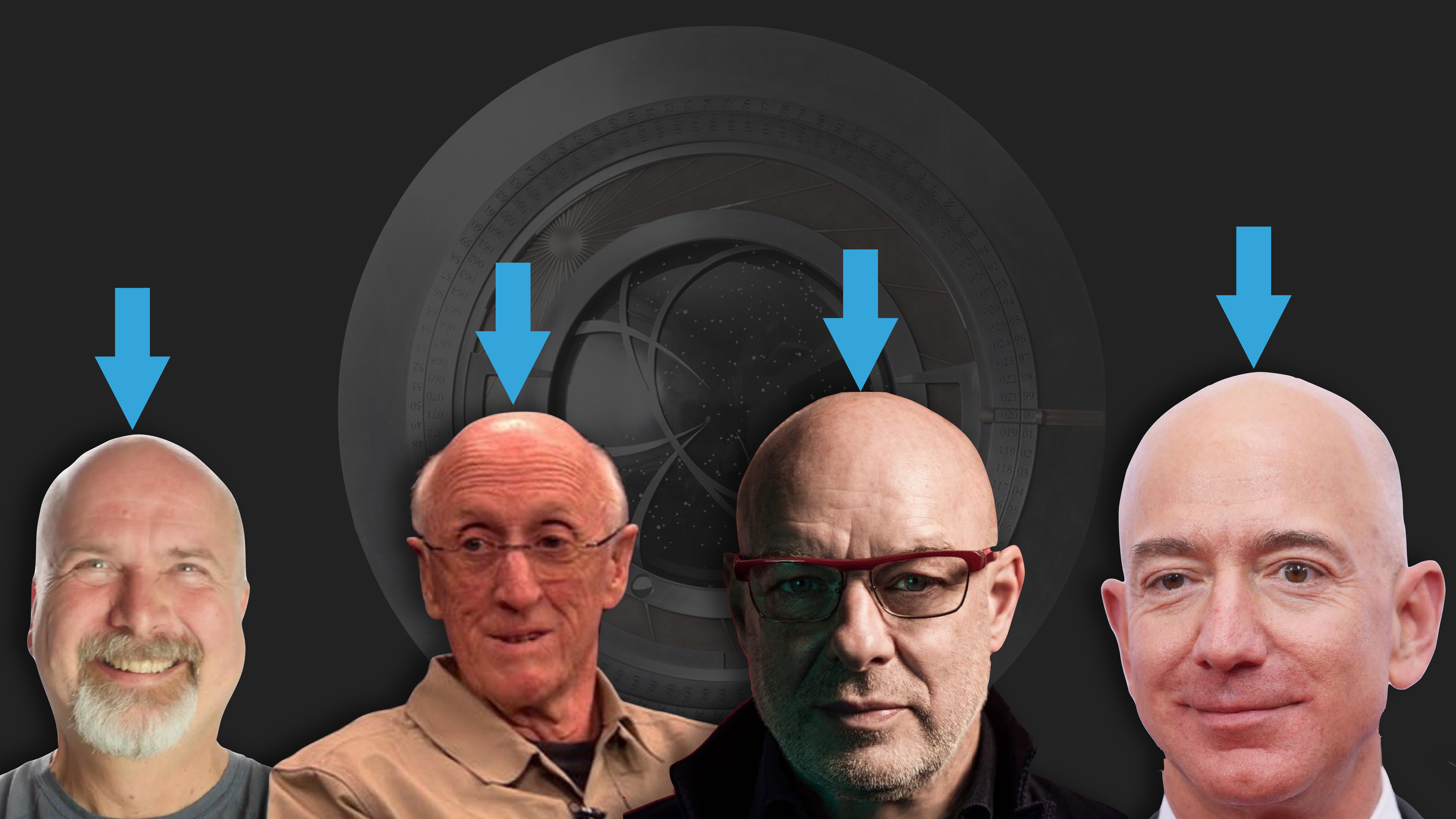
CLOCK of the LONG NOW

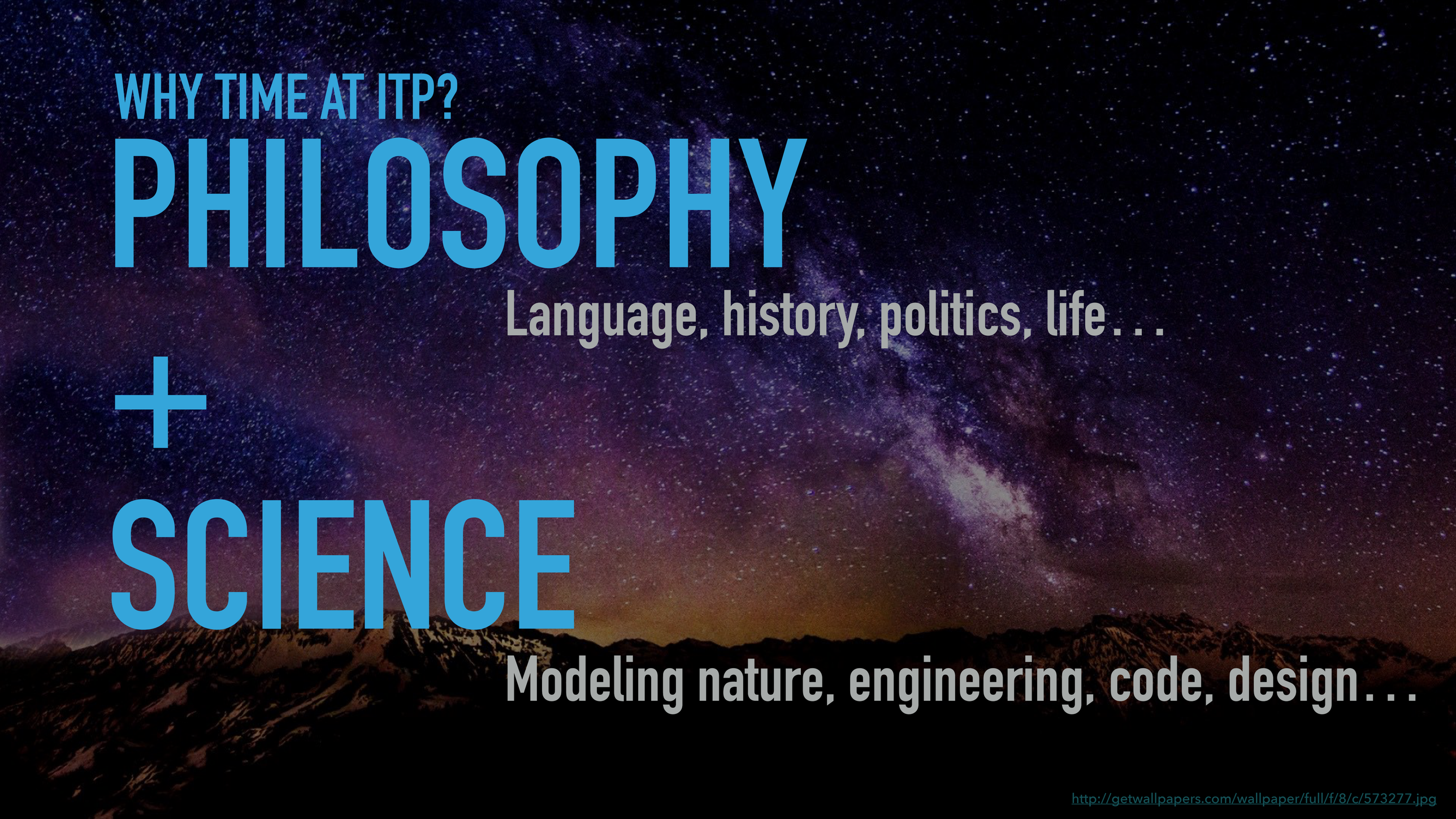
01997, ONGOING

http://longnow.org/clock/

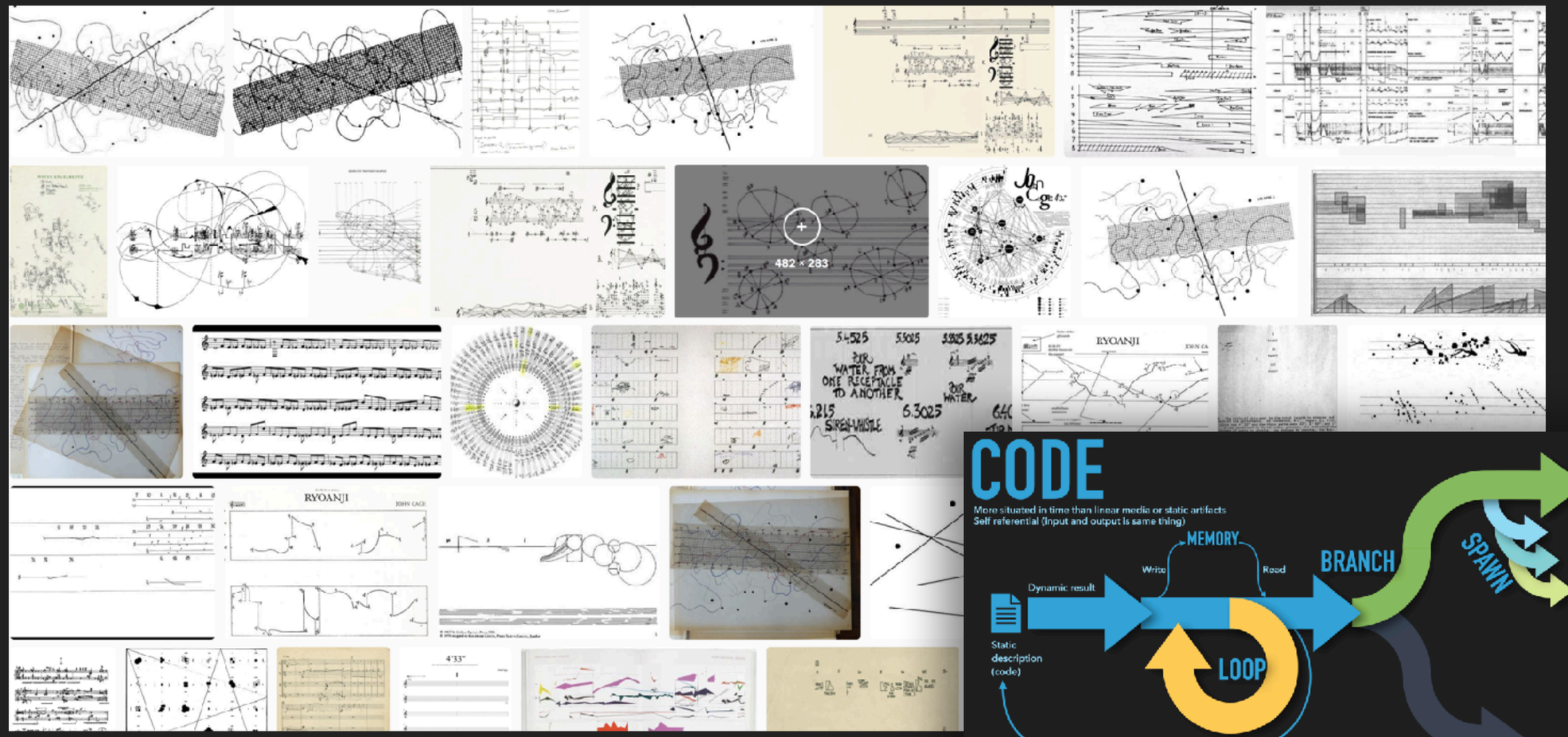

A Story That Lasts 10,000 Years (featuring Neil Gaiman)
LONG NOW
1:18 / 1:29
Scroll for details


DANNY HILLIS
Computer Science Pioneer
STEWART BRAND
Whole Earth Founder
BRIAN ENO
Musician
JEFF BEZOS
Money

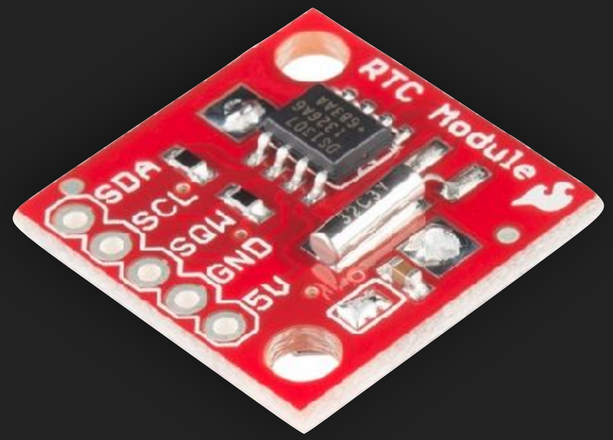



WHY TIME AT ITP?
PHILOSOPHY
Language, history, politics, life...
+
SCIENCE
Modeling nature, engineering, code, design...
http://getwallpapers.com/wallpaper/full/f/8/c/573277.jpg

Graphical music scores guide musical activity in time

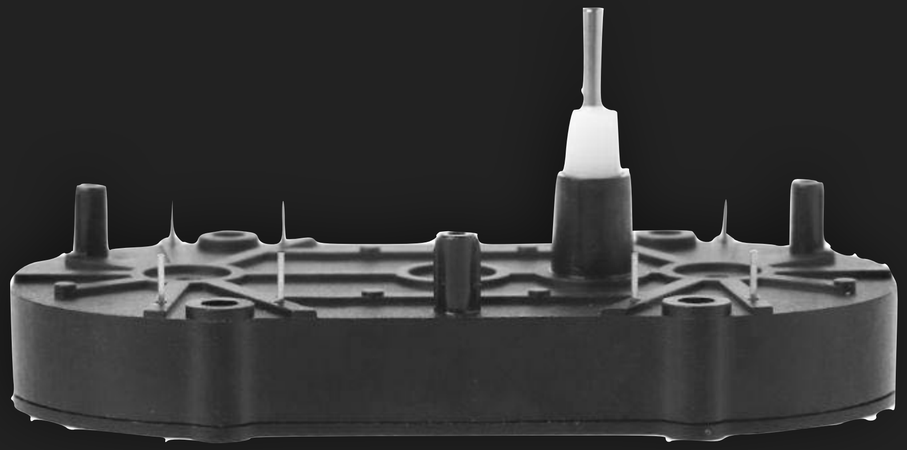


Code executes in time in unique ways
(slide from upcoming “Time Code”)



Sparkfun RTC Breakout boards

Mechanical watch movement

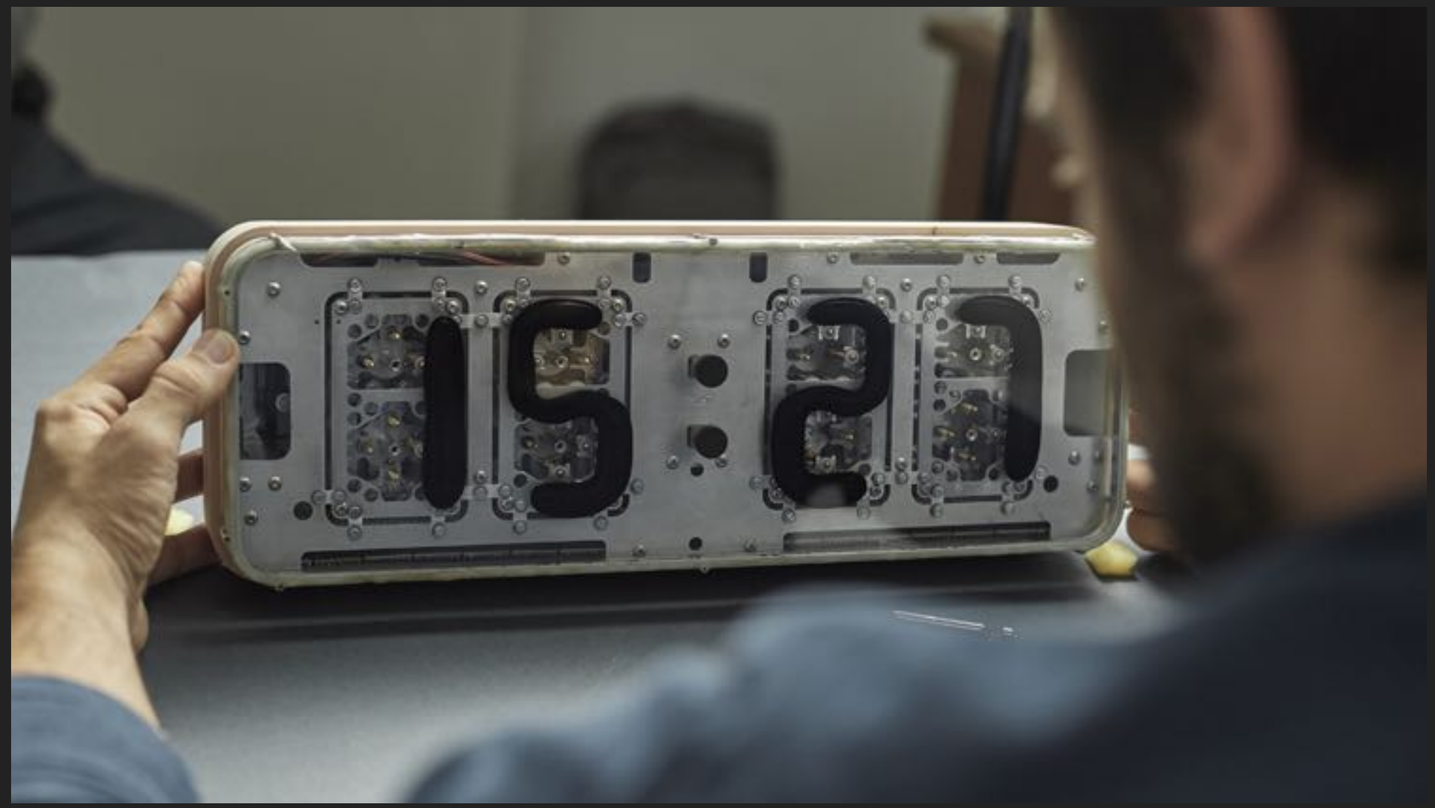


VID-28 Bi-axial stepper motor

Russian GLONASS satellite with atomic clock

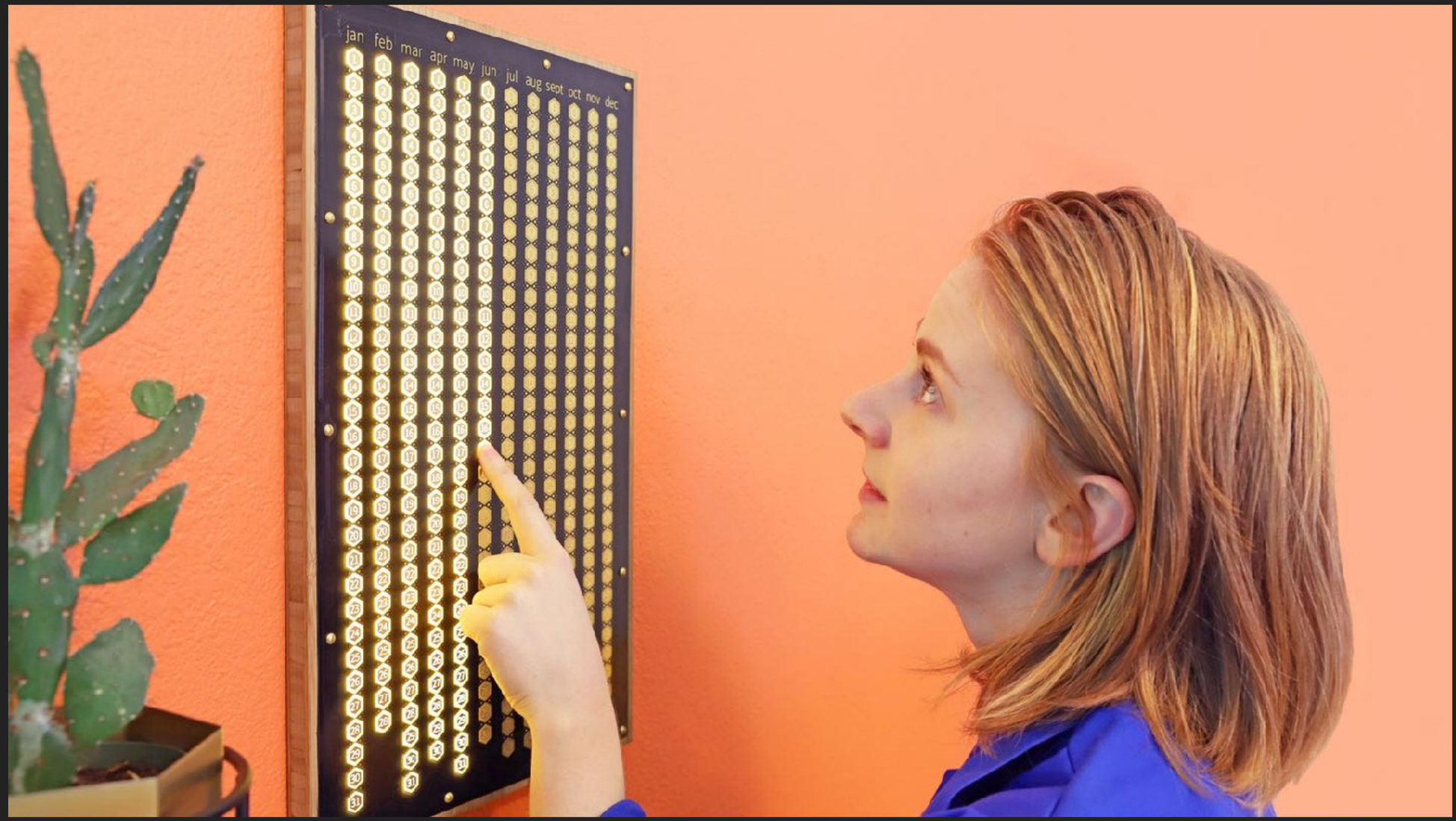
Clocks are cool

Straousborg Astronomical Clock [Atlas Obscura]



[Ferrofluid Clock]

Scott Thrift 1-year and 1-day clock



[Simone Giertz Every Day Calendar]


CASIO
F-91W
ALARM CHRONOGRAPH
SU 17
10:55 59
WATER WR RESIST
NELSONIC
OMEGA
Pulsar
2:51
CASIO
10:58 50
SEIKO
ROLEX
HAMILTON
PATEK PHILIPPE
TISSOT
TIMEX
RADO
SKAGEN
BREW
LUMINOR PANERAI GMT
Bell & Ross
MONDAINE
JACOB JENSEN
12
58
1.63mi
fitbit
ANTOINE MARTIN

So so much more, some here, some for you to find and share…

https://www.fddrsn.net/teaching/time/gallery/

Heidi Neilson's Moon Arrow always points at the moon (sometimes it's behind the Earth).

Intros from you

Group activity

ACTIVITY: HUMAN PLANETARIUM

Teams formed and assigned an object in the sky.

1. Form teams based on your day of week birth date under the International Fixed Calendar

(I am a Tuesday)

Record your day to the shared spreadsheet:

ACTIVITY: HUMAN PLANETARIUM

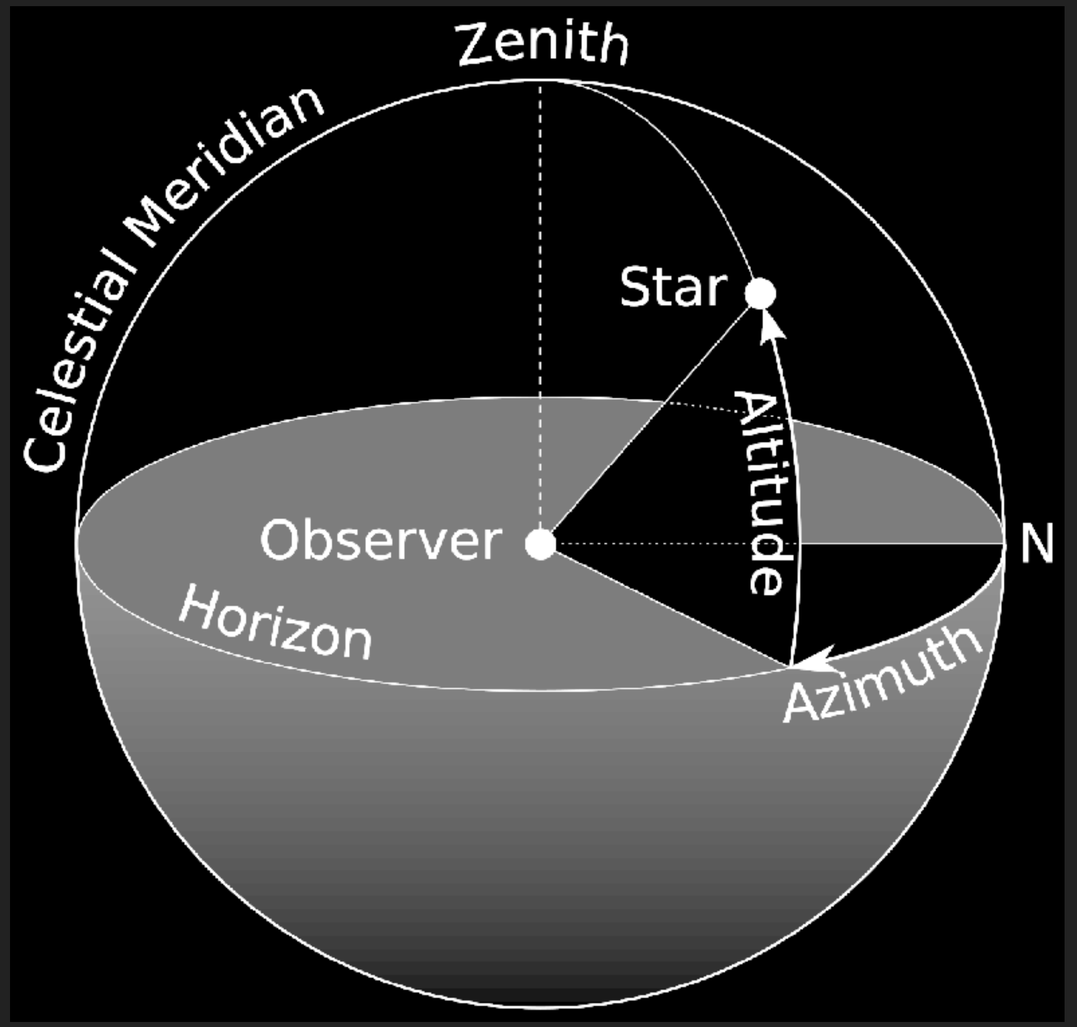
Teams formed and assigned an object in the sky.

2. Locate your object in the sky.

Use Stellarium, Suncalc and Mooncalc, etc. Make sure to set location to 370 Jay Street, and time to ~1PM EDT today. Find coordinates as Azimuth and Altitude or Elevation (as opposed to Right Ascension and Declination). Use compass and level apps to find direction towards sky object. Set compass to use true (not magnetic) north. Use anything (paper + tape, your arm, anything) as pointers.

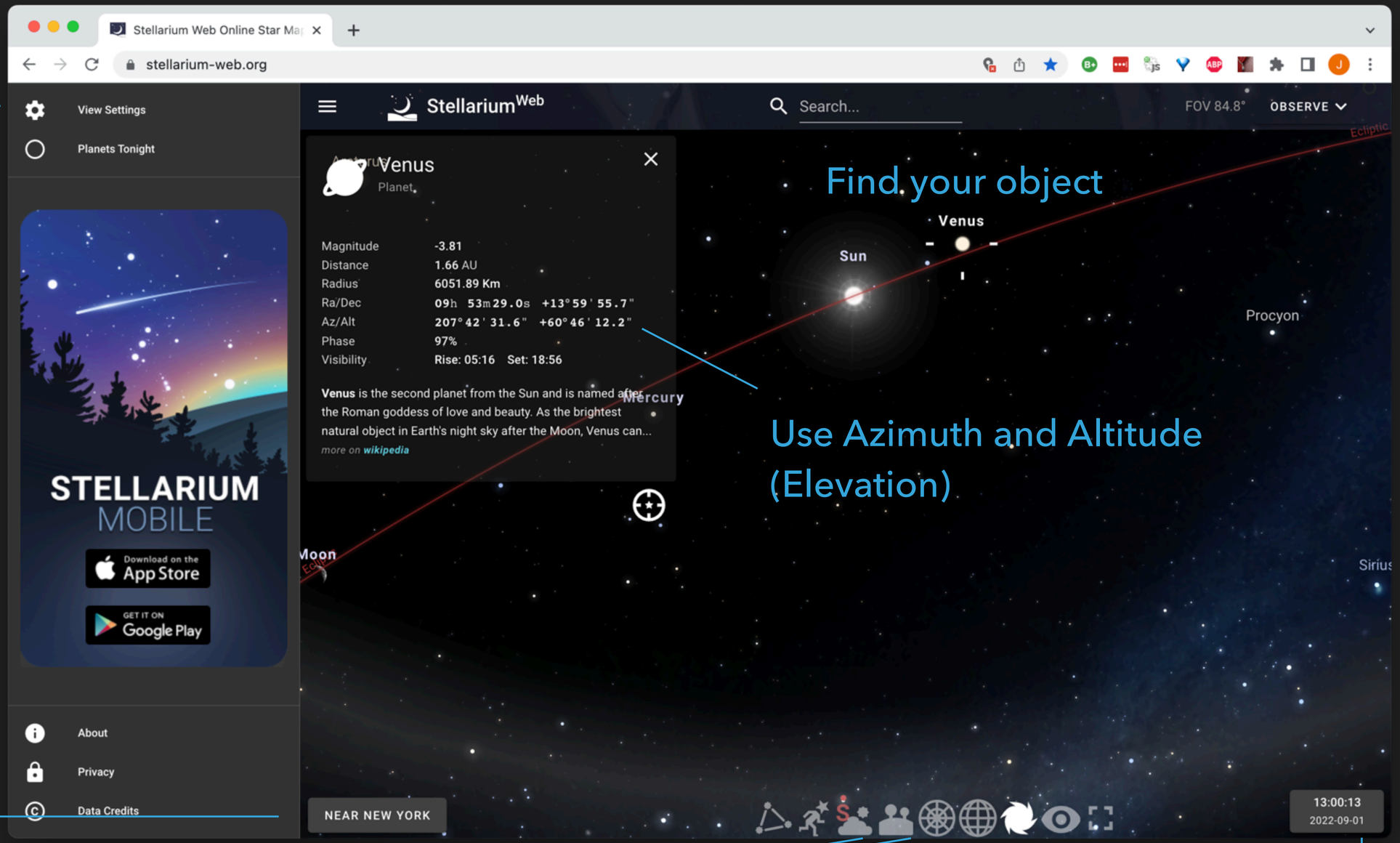
3. Create a pointer to your object.

Get creative



https://www.researchgate.net/figure/Satellite-Azimuth-and-elevation-angle_fig1_334197029

Turn on Ecliptic in View Settings



Set location

Turn off atmosphere and ground

Set to current time

Note - mobile free version is cool but doesn't offer the useful ecliptic setting

Sky objects

Mars

Mercury

Moon

Venus

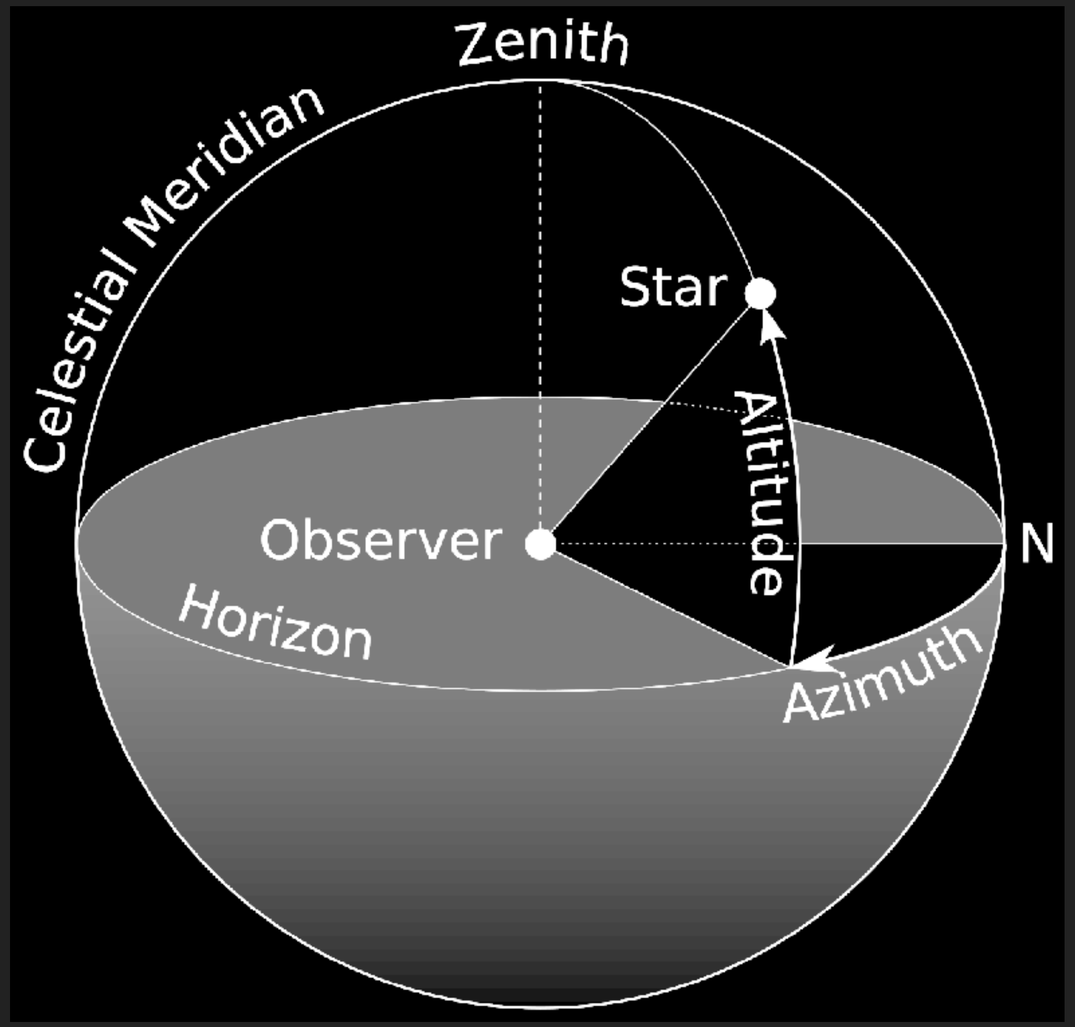
Saturn

Polaris

Capella

Azimuth to direction

North = 0
East = 90
South = 180
West = 270



GNOMON

gnomon (n.)

"vertical shaft that tells time by the shadow it casts" … from Latin *gnomon*, from Greek *gnōmōn* "indicator (of a sundial), carpenter's rule" … "one that discerns or examines, interpreter, expert," from *gignōskein* "to come to know," **from Proto-Indo-European root *gno- "to know."**

https://www.etymonline.com/word/gnomon

TAOSI GNOMON

Xiangfen 襄汾, Shanxi Province

2300 - 1900 BCE

Oldest gnomon, oldest observatory

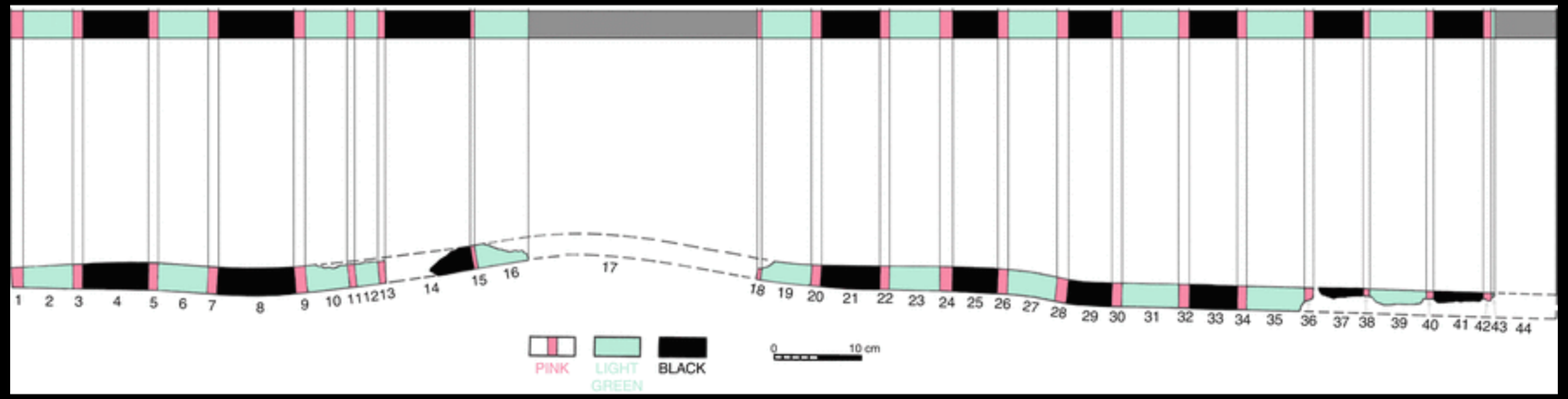
Handbook of Archaeoastronomy and Ethnoastronomy

TAOSI GNOMON

Xiangfen 襄汾, Shanxi Province

23rd - 19th century BCE

Oldest gnomon, oldest observatory



Handbook of Archaeoastronomy and Ethnoastronomy

TAOSI GNOMON

Xiangfen 襄汾, Shanxi Province

2300 - 1900 BCE

Oldest gnomon, oldest observatory

Handbook of Archaeoastronomy and Ethnoastronomy

EGYPTIAN SUNDIAL

13th century BCE

“temporary hours”

livescience.com

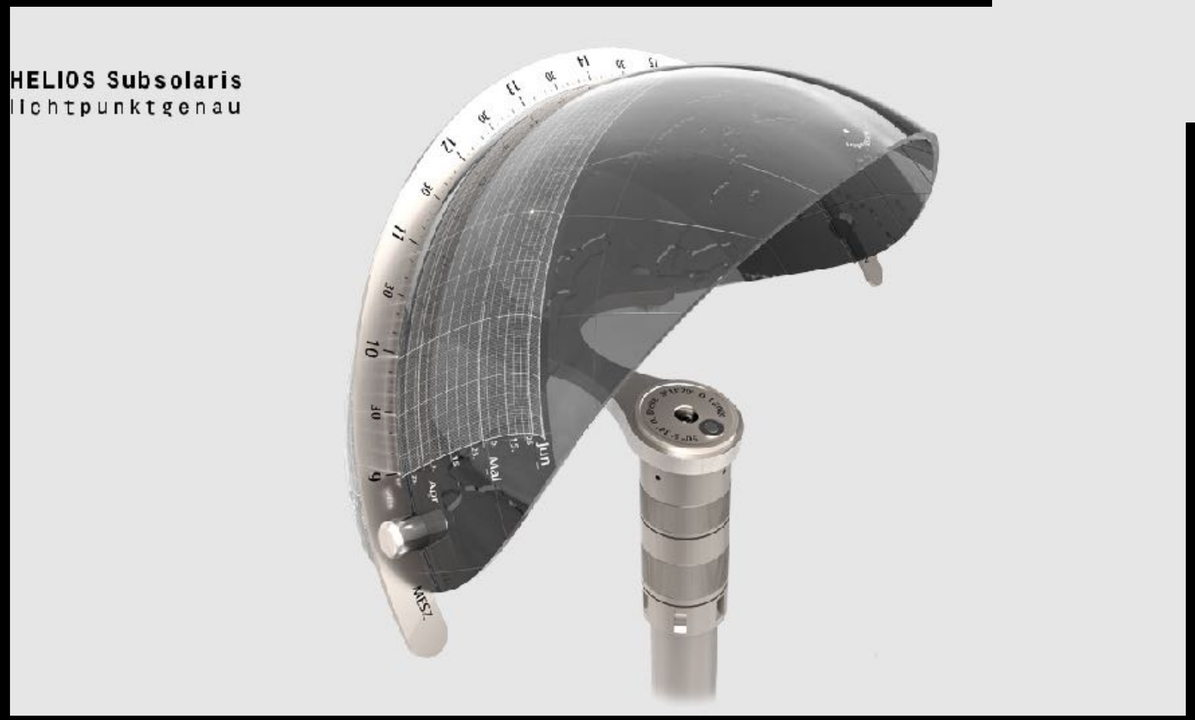
BYZANTINE SUNDIAL
6TH CENTURY CE

http://hist.science.online.fr/


JANTAR MANTAR, JAIPUR
goibibo.com

JANTAR MANTAR, JAIPUR

wikipedia

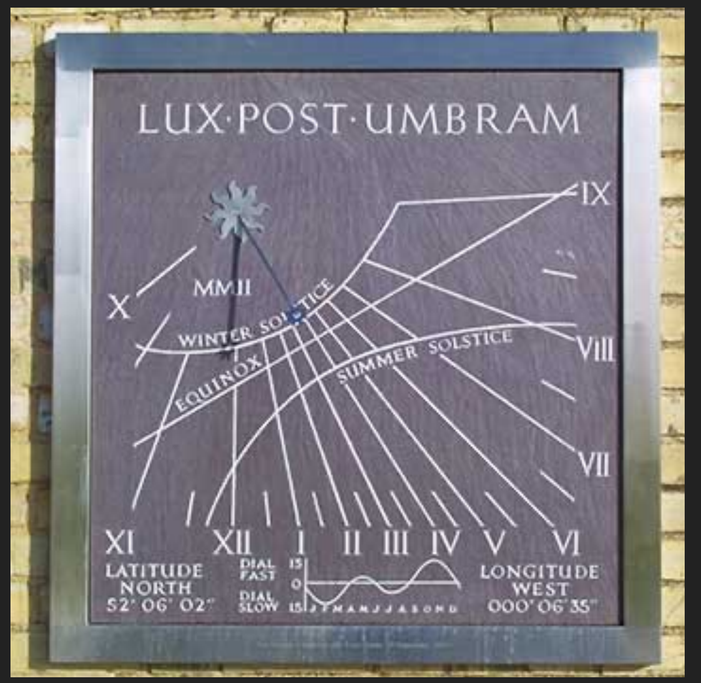


https://www.helios-sonnenuhren.de/en/helios-subsolaris
https://www.helios-sonnenuhren.de/en/helios-solar-ring

HORIZONTAL

sundialsoc.org.uk

VERTICAL



https://www.davidharber.co.uk/

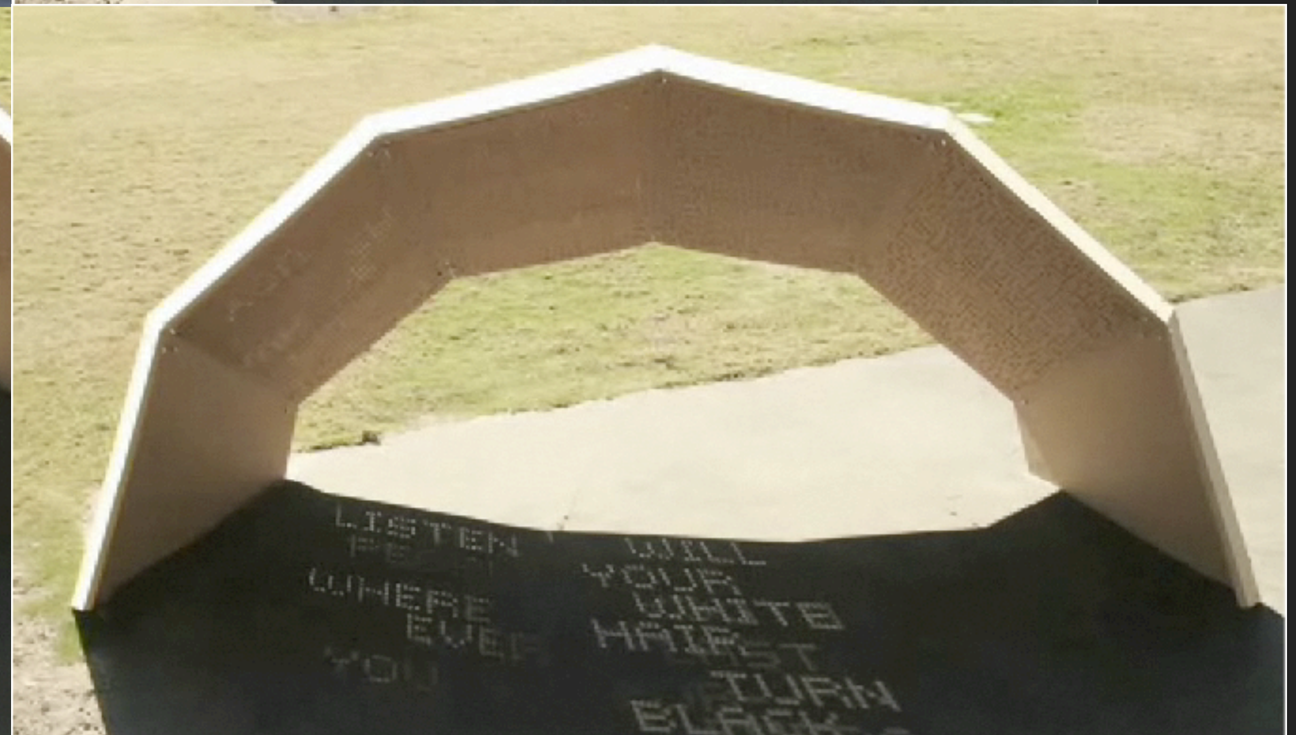
EQUITORIAL

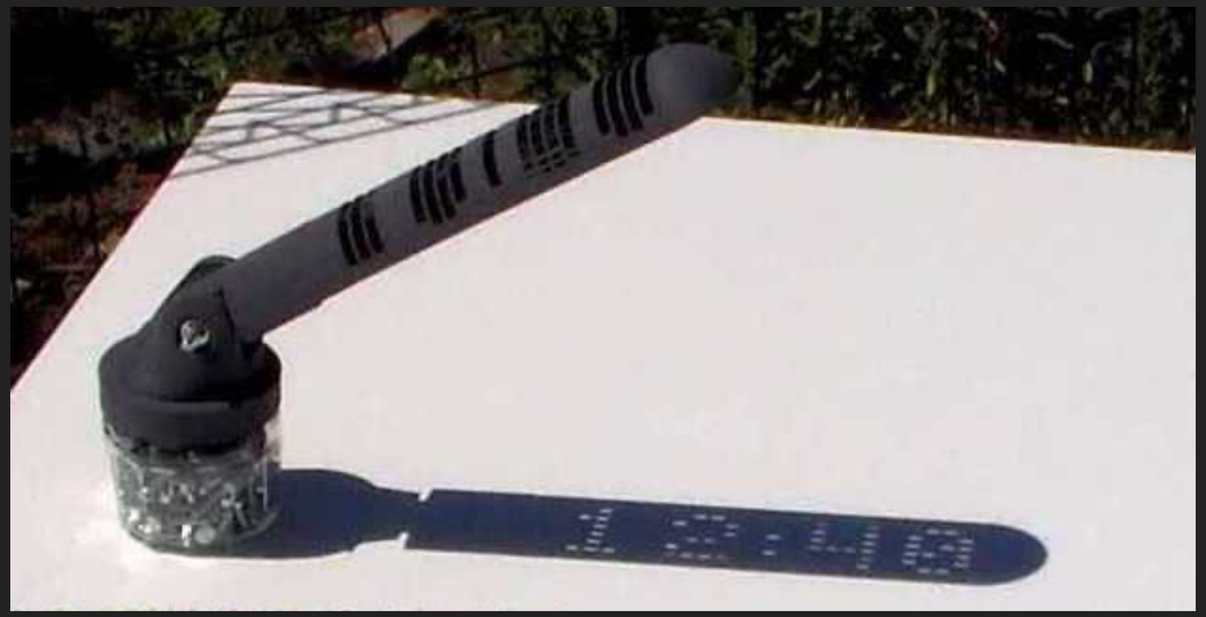
ebay.com

CONCAVE

Jang Yeong-sil Science Garden

JIYEON SONG, ONE DAY POEM PAVILION





DIGITAL

https://www.thingiverse.com/thing:1068443

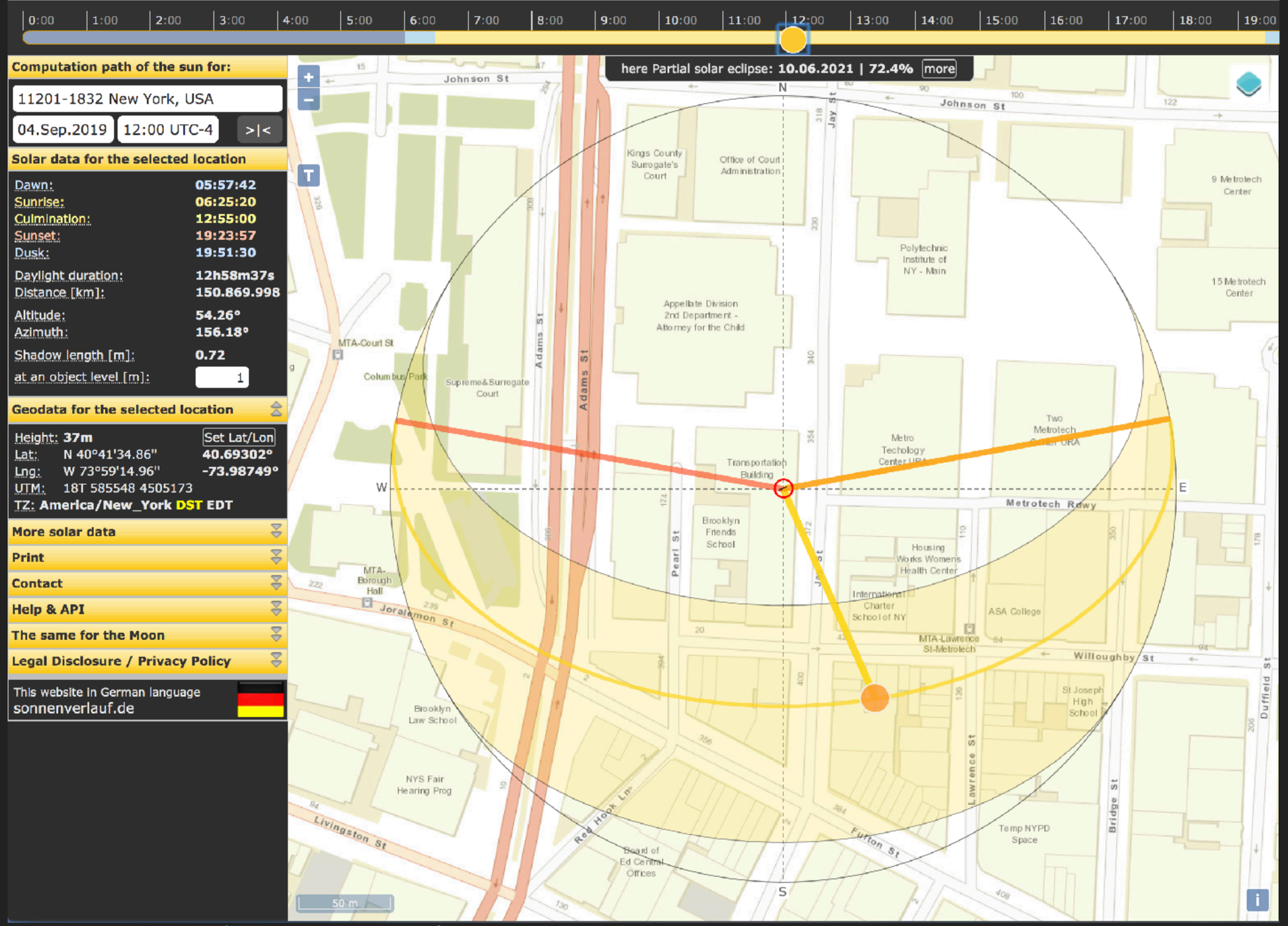
EVERY CITY IS A SUNDIAL

https://www.youtube.com/watch?v=_E3IqHq2tNU

MANHATTAN HENGE

EVERY WINDOW . . .

EVERY WINDOW . . .



https://www.suncalc.org/#/40.693,-73.9875,17.72/2019.09.04/14:54/1/3

https://www.suncalc.org/#/40.693,-73.9875,17.72/2019.09.04/14:54/1/3

0:00 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00

here Partial solar eclipse: **10.06.2021 | 72.4%** more

Computation path of the sun for:

11201-1832 New York, USA

04.Sep.2019 | 14:54 UTC-4 | >|<

Solar data for the selected location

Dawn:	05:57:42
Sunrise:	06:25:20
Culmination:	12:55:00
Sunset:	19:23:57
Dusk:	19:51:30
Daylight duration:	12h58m37s
Distance [km]:	150.865.563
Altitude:	47.20°
Azimuth:	226.44°
Shadow length [m]:	0.93
at an object level [m]:	1

Geodata for the selected location

Height: **37m** Set Lat/Lon

Lat:	N 40°41'34.86"	40.69302°
Lng:	W 73°59'14.96"	-73.98749°
UTM:	18T 585548 4505173	

TZ: **America/New_York DST EDT**

More solar data

Print

Contact

Help & API

The same for the Moon

Legal Disclosure / Privacy Policy

This website in German language
sonnenverlauf.de