Historia y orígenes de la Astronomía

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Octubre del 2020

Prehistoria



Mesopotamia



Tablilla de Venus del período neoasirio 1702 a. C.

Mesopotamia

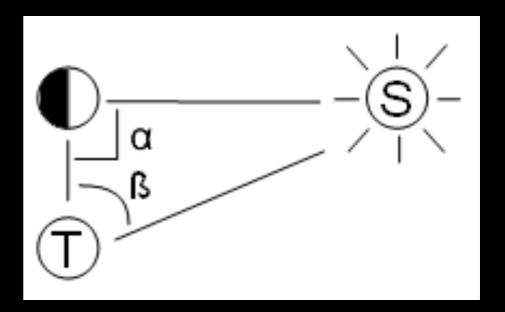


Tablilla que atestigua el avistamiento del cometa Halley en el año 164 a. C.

Grecia

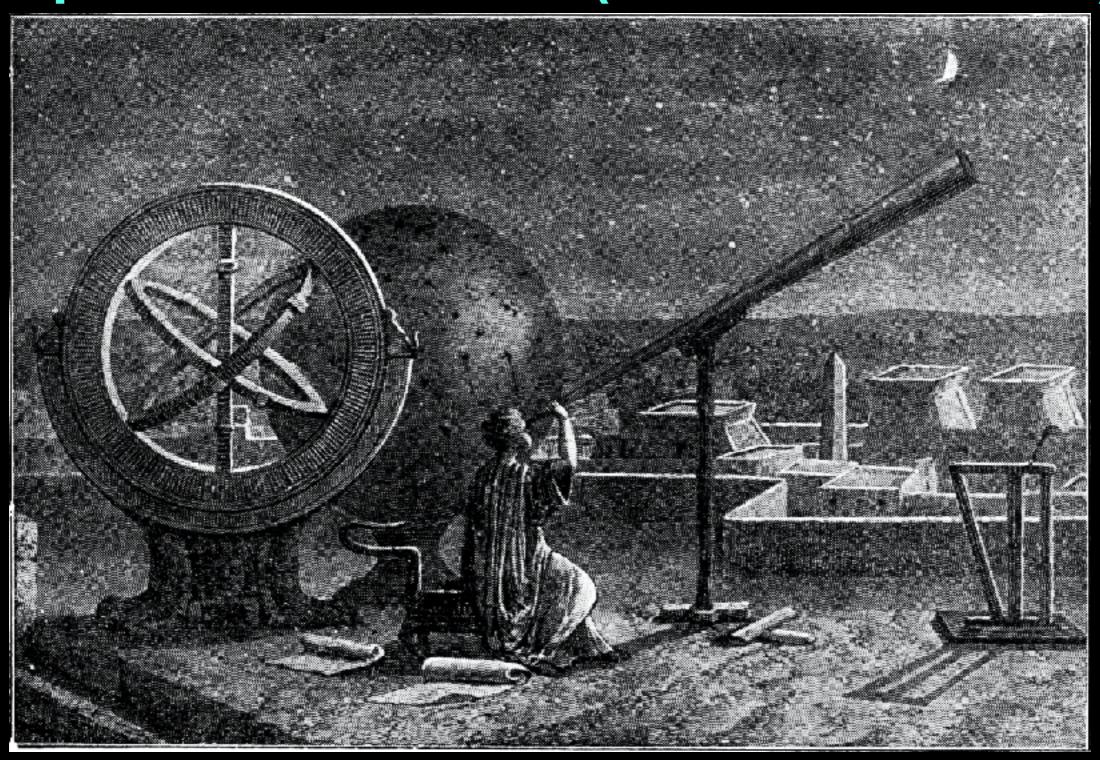
Aristarco de Samos (310 - 230 a. C.)





Grecia

Hiparco de Nicea (190 - 120 a. C.)



Grecia

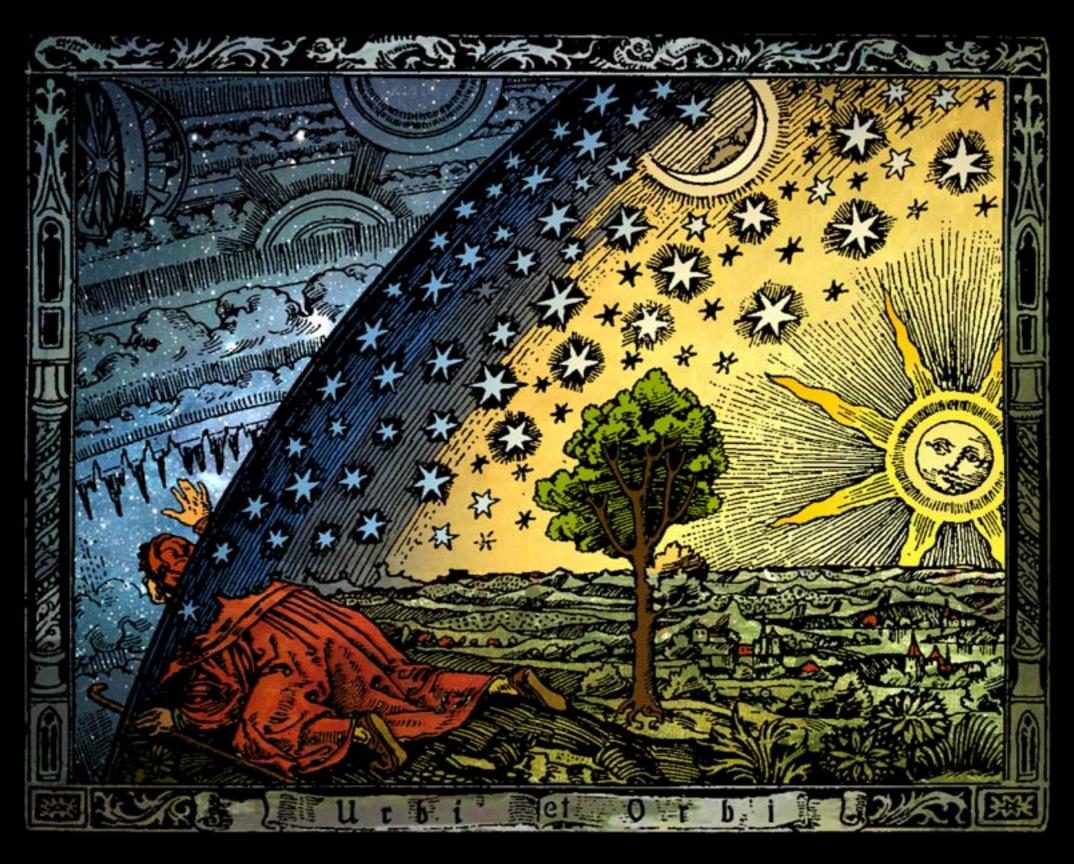
Claudio Ptolomeo (100 - 170 d. C.)





Almagesto

El Universo Ptolemaico



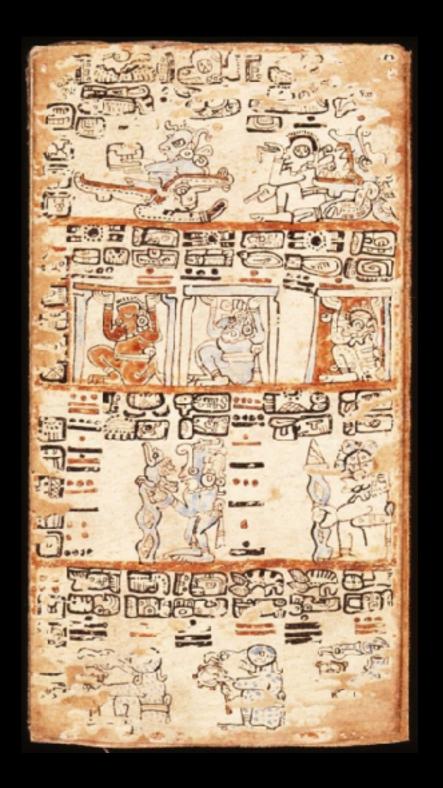
Los Mayas





Los Mayas Códices



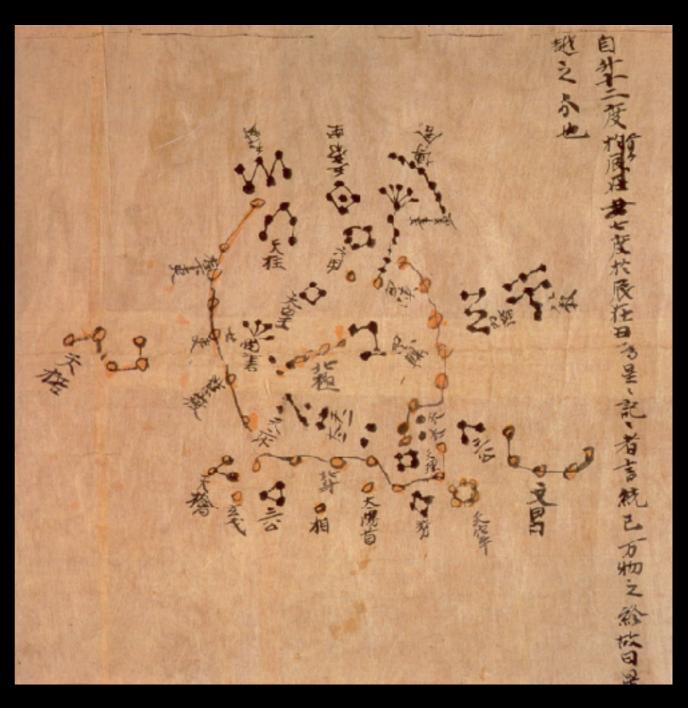


Dresden

Madrid

China



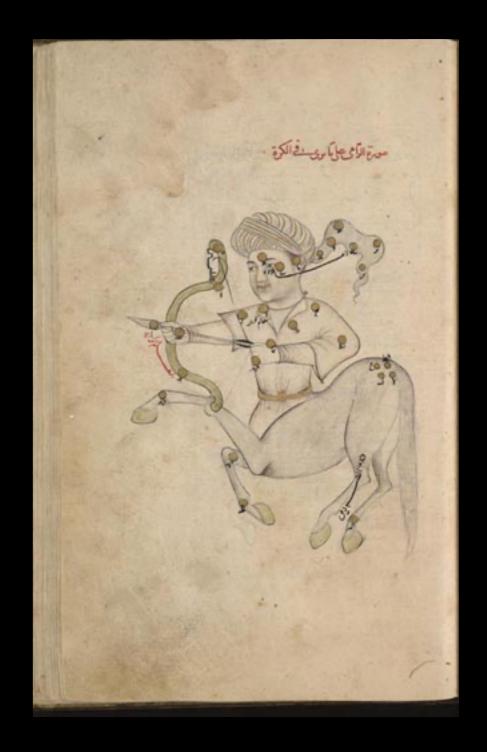


Mapa de Dunhuang

Observatorio de Cheomseongdae

Arabia



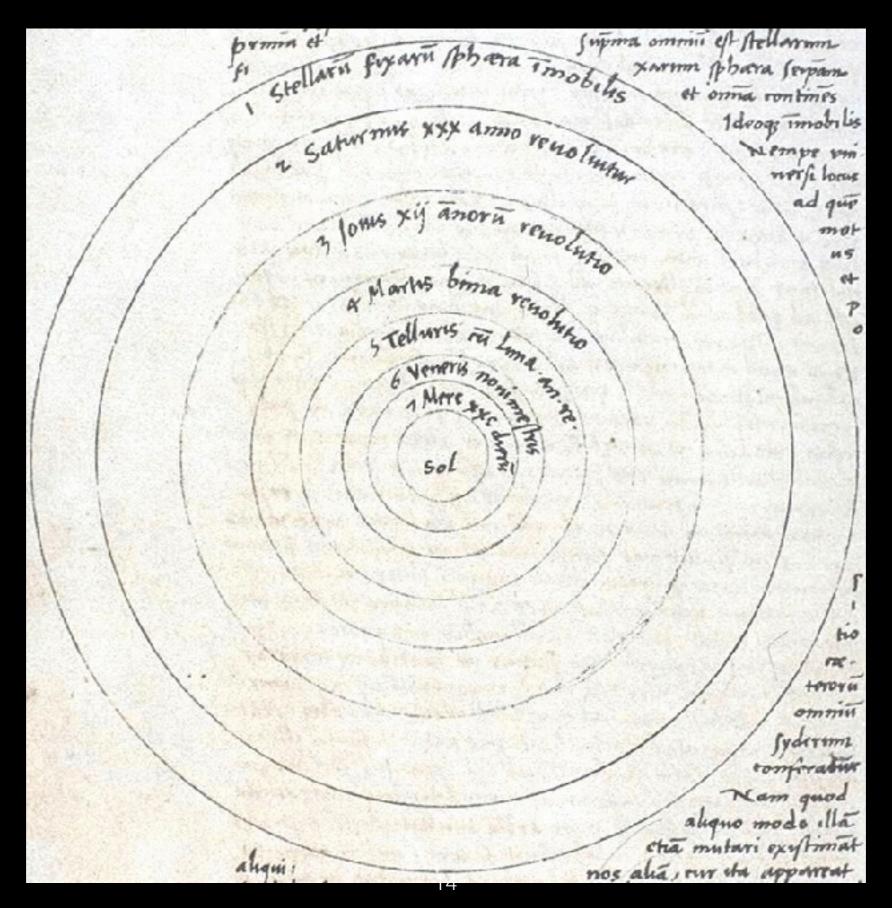


Astrolabio

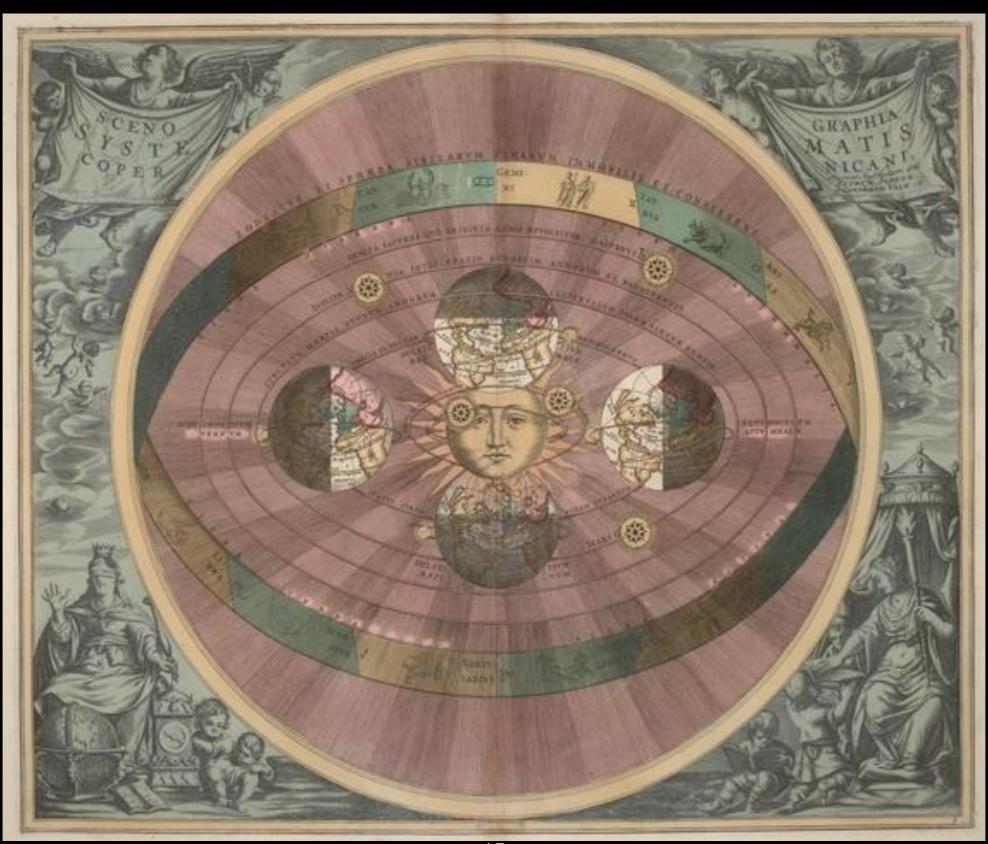
Nicolás Copérnico



De revolutionibus orbium coelestium



De Revolutionibus



Johannes Kepler



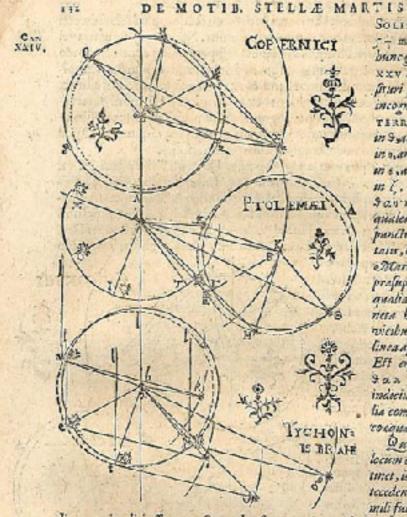
Astronomia nova

Sours ungal m

5 - m. quantin bunceradum cay. xxv libere inquifitteri fitzius quali incomitum. Et fil TERRA A. MDXC in Sanno Moxett in a anno moxem WE & ARRIVO MEDICA m (, Et angali Januarea (a. qualer, quia a eli punctum equalitain, & periodica Marin tempora presupponenture. qualia. Sing Planera bis quartos wieder in x, eing, linea applianto az. Eft ergo anguine Fax feciendum indection anomalia communicationis

Qued vilums

locum Martis attinet, is die iv antecedente inva fi-



mili fuit 14.21 v. diurnus ejus diei effet 44. Erge adnostrum tempus vosus fuit in 15.6 v. que est sinus linez 32. Sed an tendit in 15.55.45 v. Erge 5 va est 16.45.45. Re-siduus igitur u 3 x ad duoi reitos est 22.7.14.

Vi seitur finus an ad a a quam dicenus esse partium 100000: se na ad na questium. Est ergo na 66774.

Quod fi relique nasea, (a cjuidem prodibunt longitudinis, fal-

fumerit quod fuspicor, at fi diverle, omnino vicero.

Stovn Do igitur, anno n Dichi ad rioftrum memenium ili longuido coaquata 1.15.35. 13: commutatio enaquata §. 24.16.34, boe est, na zangulus est § 4.16.34. boe est, na zangulus est § 4.16.34. Vifui est die inili fanuar. H. vii. M. nv inil. 34 f. v correttione per parallaxin adhibita. Et est motus bidus ejus 1.25. Ergo die ini lora vii M. nv inil. 9 f. v est coifui. Refiana ferupula hore alpiciant, dimidium minutum. Ergo angums nna est 35.46.23.85 and 66.3.35. 65 and 67.457 jam longiur quam a.5. Sante quia Solversus peregeum descendie, 85

Isaac Newton



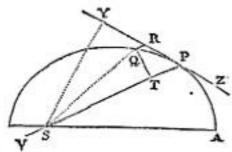
Philosophiæ Naturalis Principia Mathematica

AS PHILOSOPHIÆ NATURALIS

DE MOTU

Corol. 4. Iifdem positis, est vis centripeta ut velocitas bis directe, & chorda illa inverse. Nam velocitas est reciproce ut perpendiculum \$7" per corol. 1. prop. 1.

Corol. 5. Hinc si detur figura quævis curvilinca APQ, & in ea detur etiam punctum S, ad quod vis centripeta perpetuo dirigitur, inveniri



tripeta perpetuo dirigitur, inveniri potest lex vis centripetæ, quacorpus quodvis P a cursu rectilineo perpetuo retractum in figuræillius perimetro detinebitur, eamque revolvendo describet. Nimi-

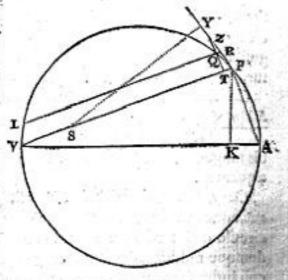
rum computandum est vel solidum $\frac{SPq \times QTq}{QR}$ vel solidum $STq \times PV$ huic vi reciproce proportionale. Ejus rei dabimus exempla: in problematis sequentibus.

PROPOSITIO VII. PROBLEMA II.

Gyretur corpus in circumferentia circuli, requiritur lex vis. centripeta tendentis ad punctum quodcunque datum.

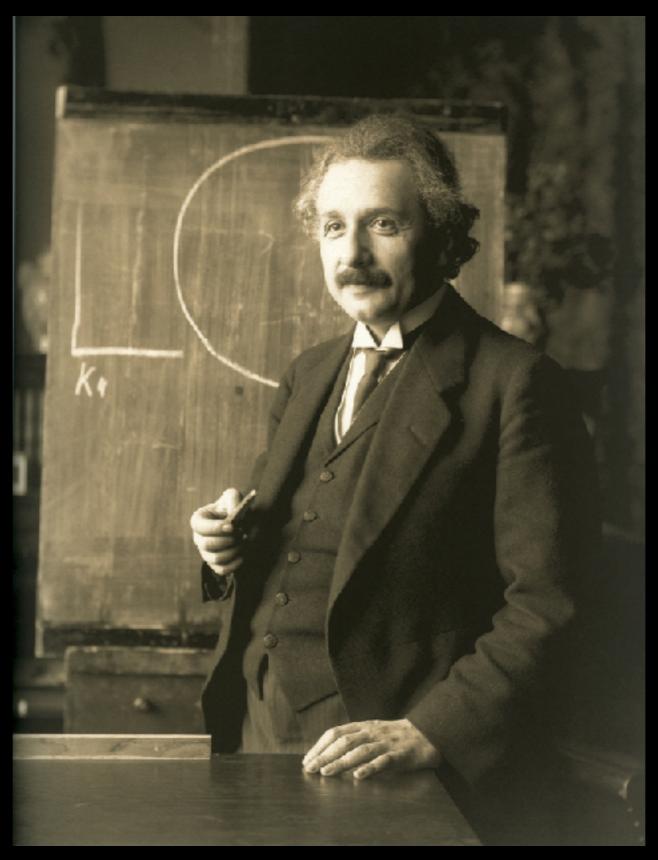
Esto circuli circumferentia

VQPA; punctum datum, ad
quod vis ceu ad centrum suum tendit, S; corpus in circumferentia latum P; locus
proximus, in quem movebitur
Q; & circuli tangens ad locum priorem PRZ. Per
punctum S ducatur chorda
PV; & acta circuli diametro
VA, jungatur AP; & ad
SP demittatur perpendiculum
QT, quod productum occurrat tangenti PR in Z; ac denique per punctum P acesture I

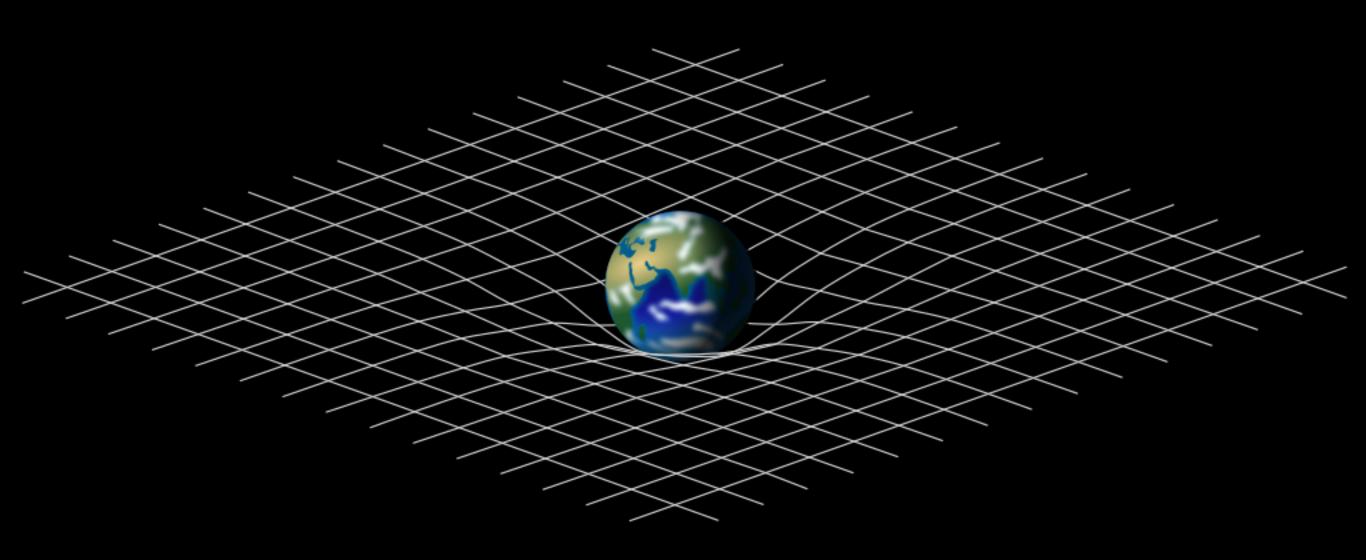


nique per punctum 2 agatur LR, quæ ipfi SP parallella fit, & occurrat tum circulo in L, tum tangenti PZ in R. Et ob fimilia triangula Z2R, ZTP, VPA; crit RP quad. hoc est 2RL ad a grand

Albert Einstein



Relatividad General

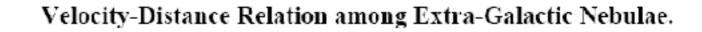


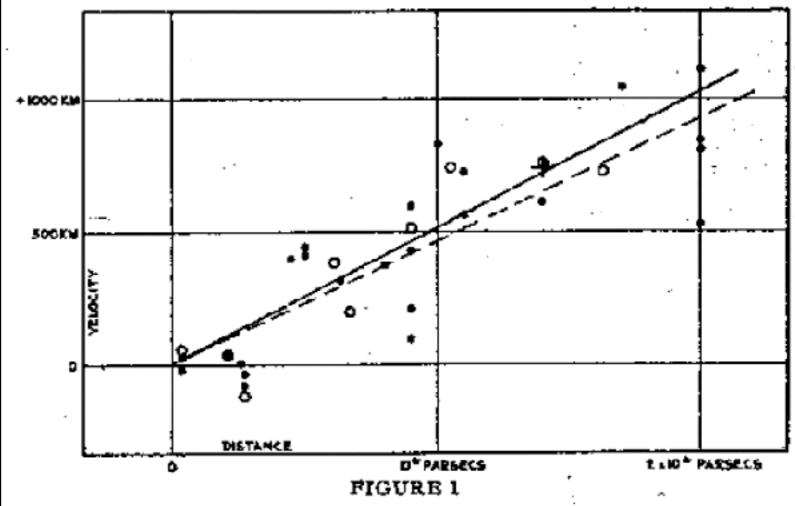
Edwin Hubble



Ley de Hubble







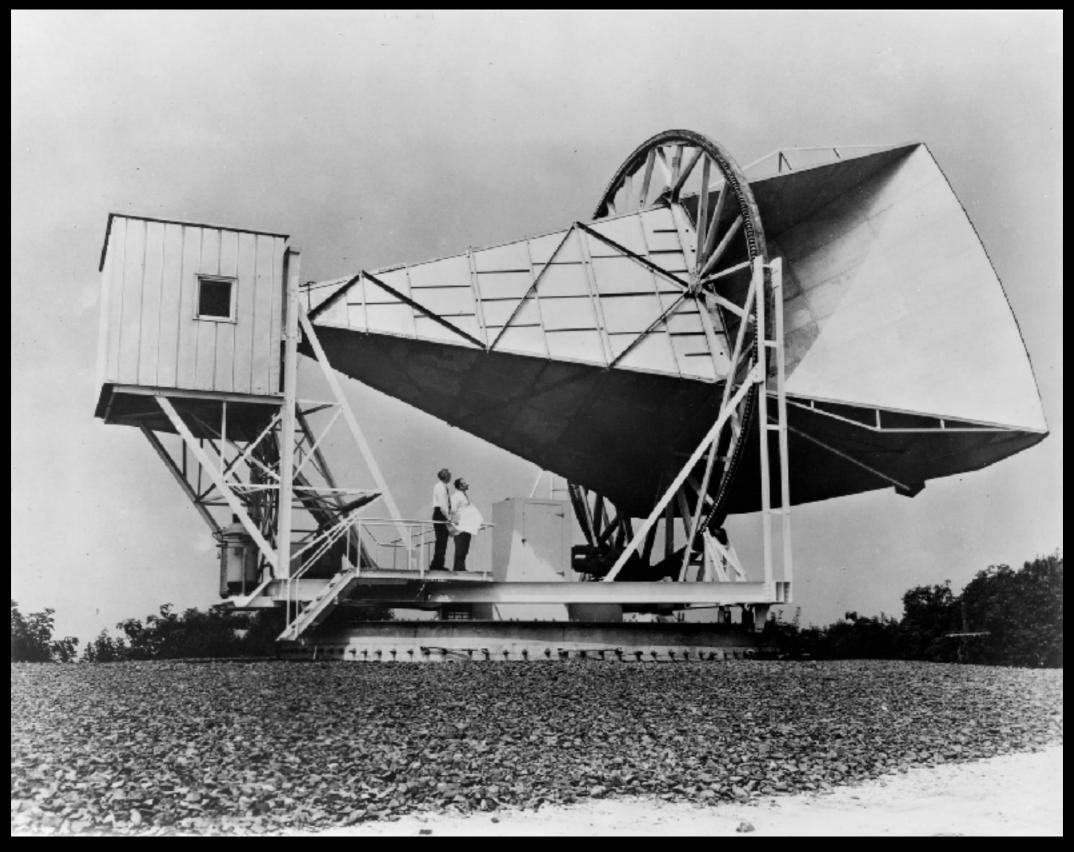
Expansión del Universo



www.spacetelescope.org

La Gran Explosión

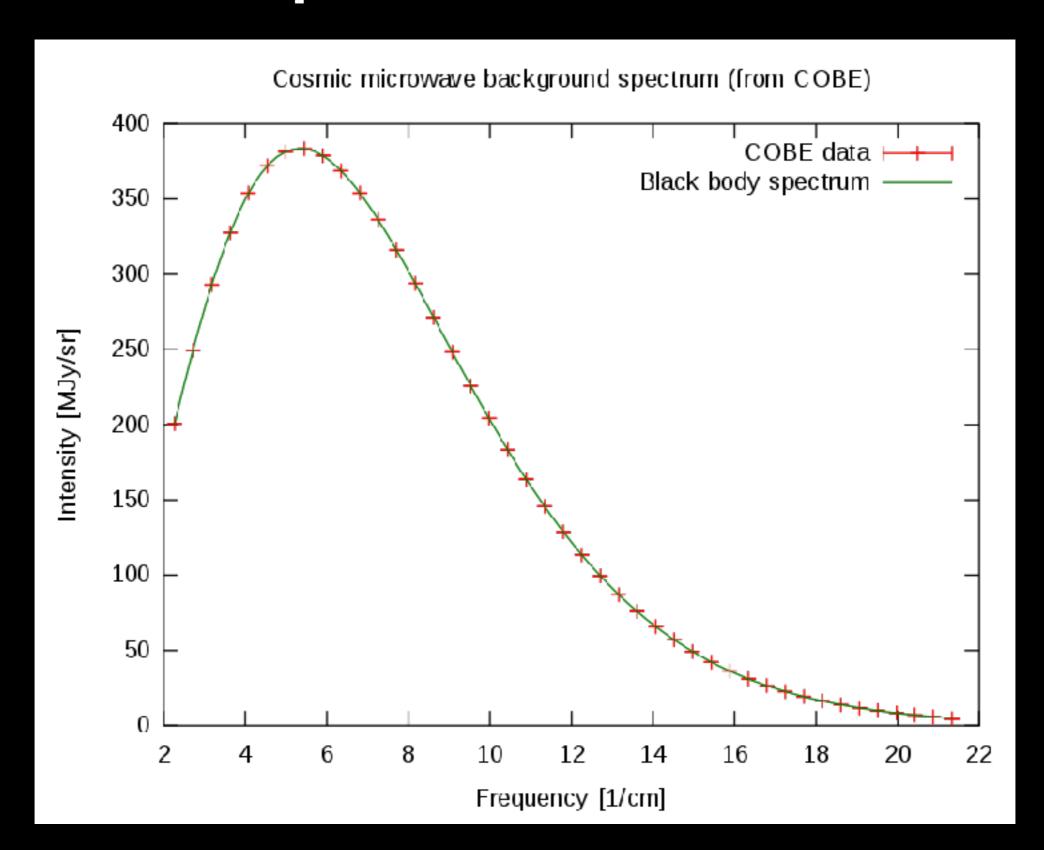
Fondo de Radiación de Microondas (CMB)



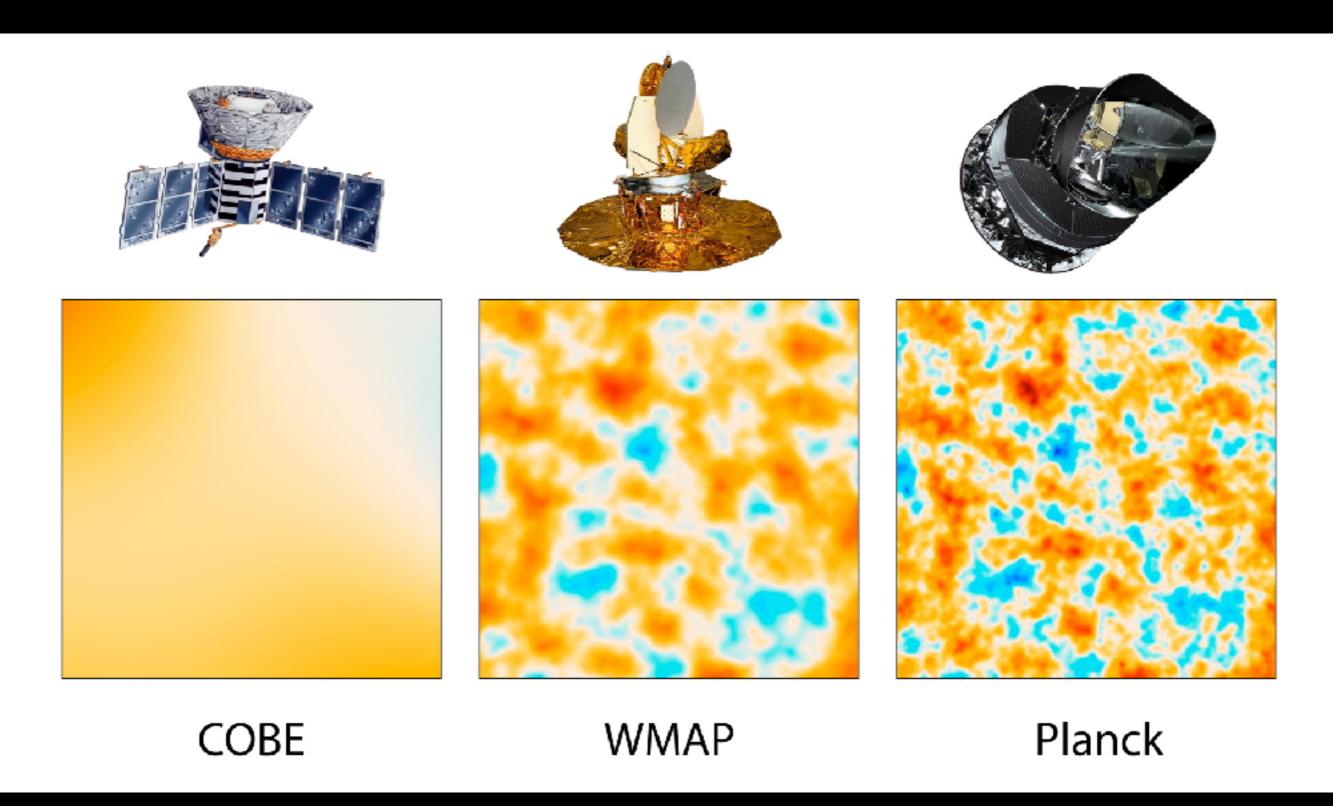
COBE



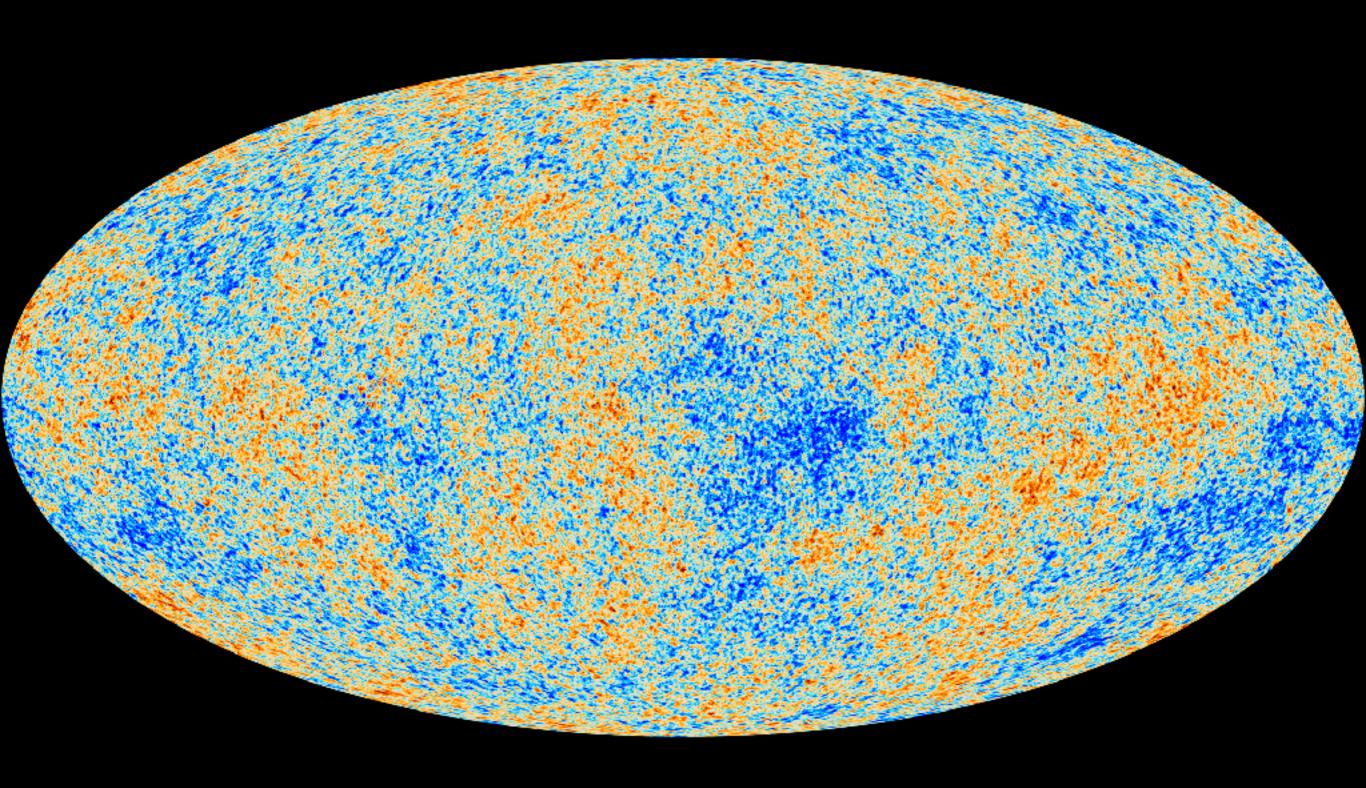
Espectro del CMB



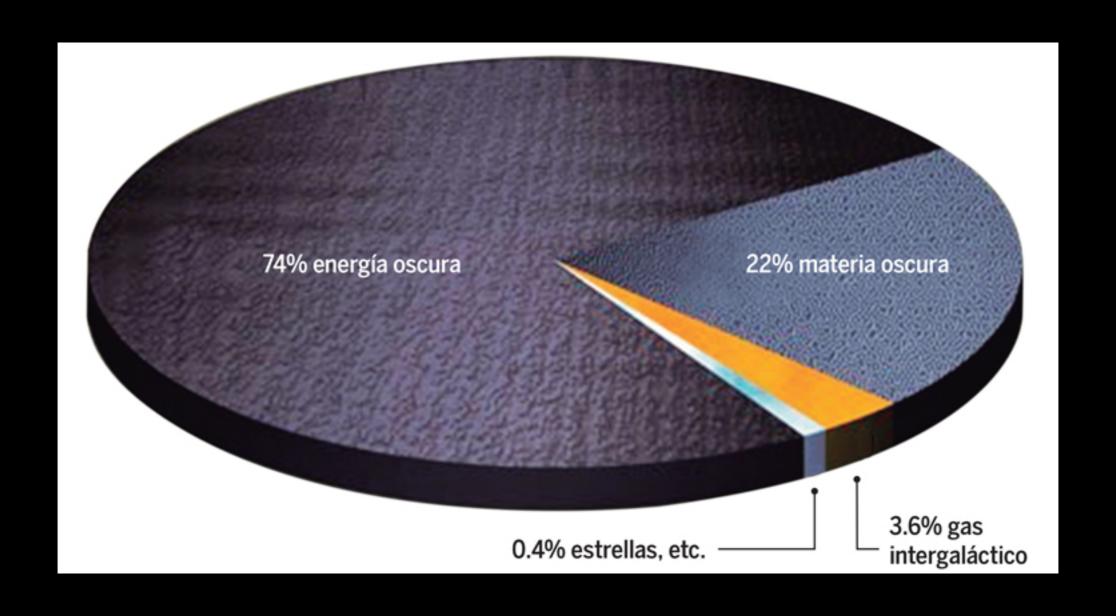
Nuevas Mediciones del CMB



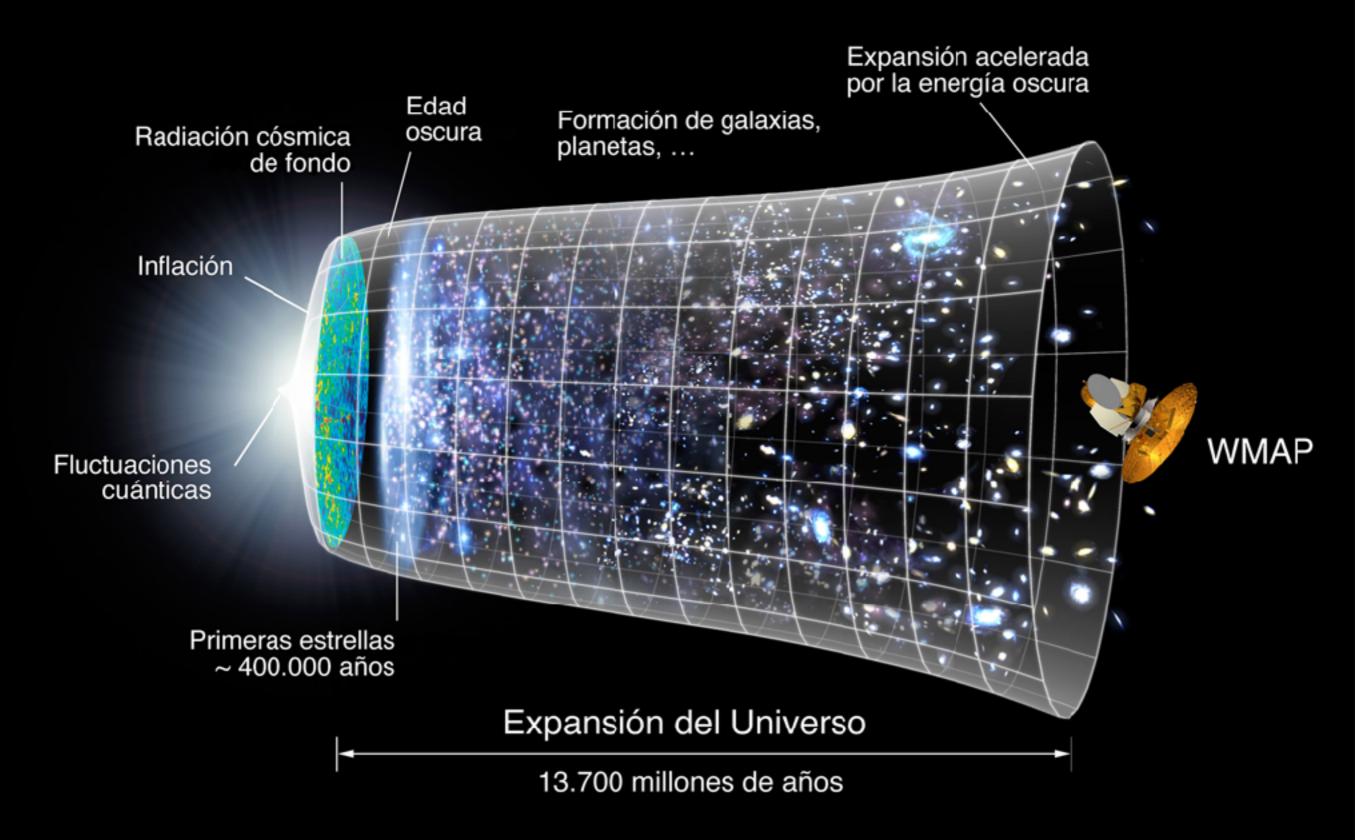
Fondo de Radiación de Microondas (CMB)



¿De qué está hecho el Universo?



Un modelo del Universo



32 NASA/WMAP Science Team