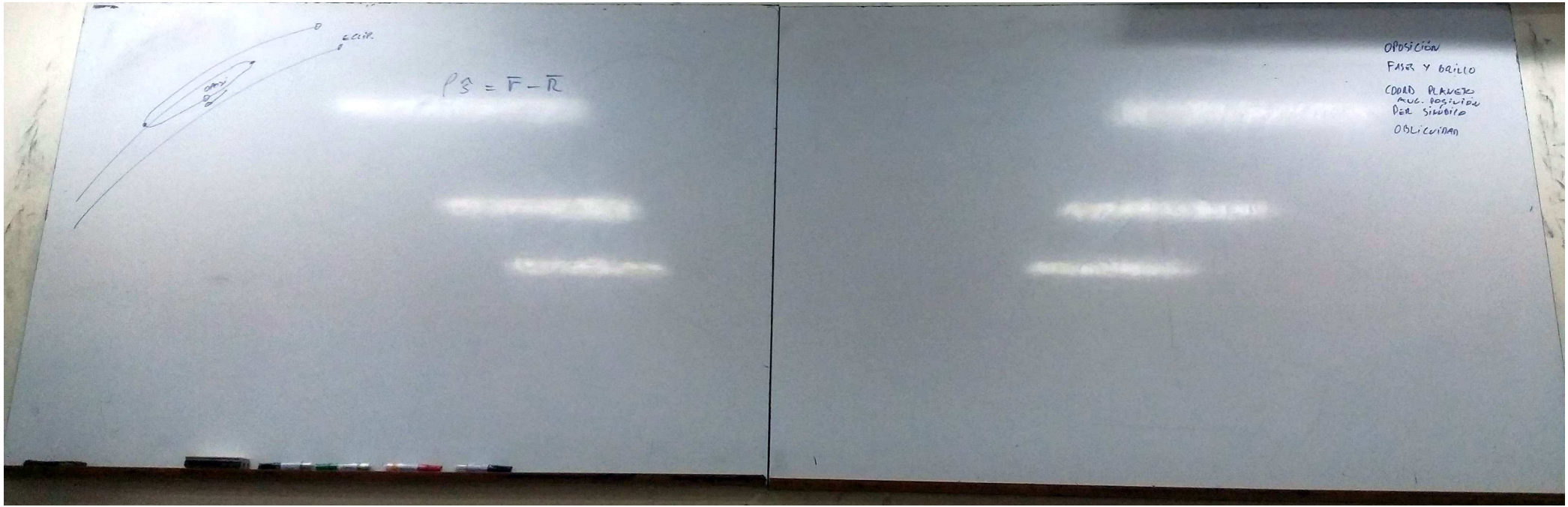
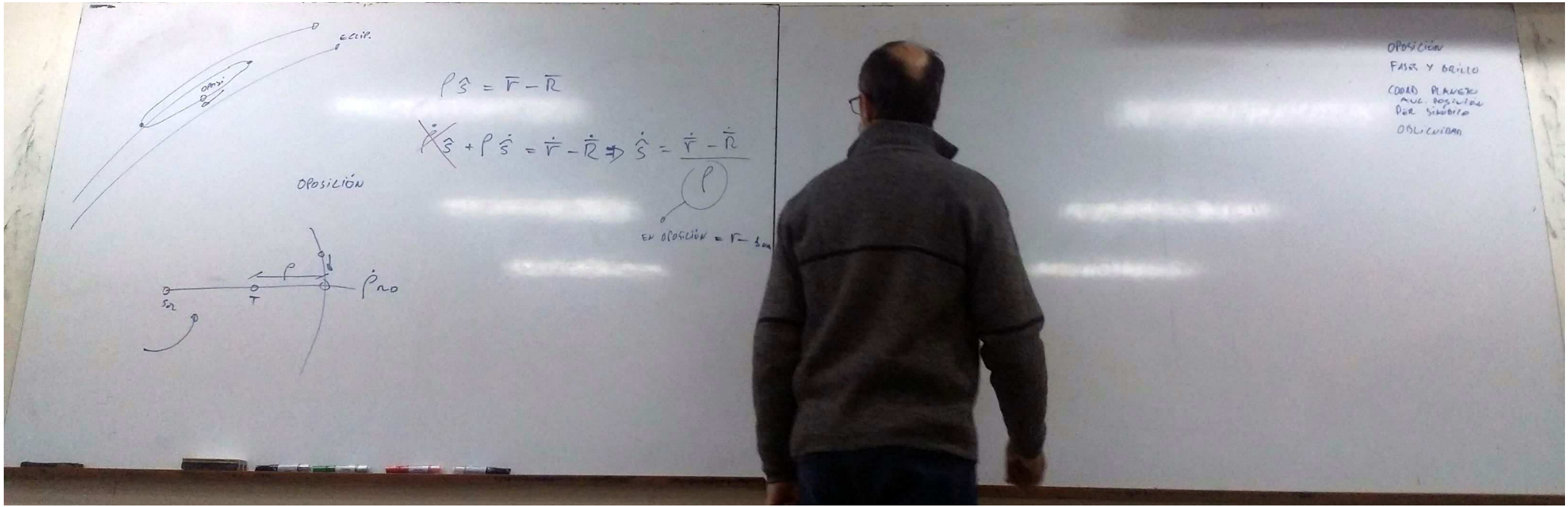
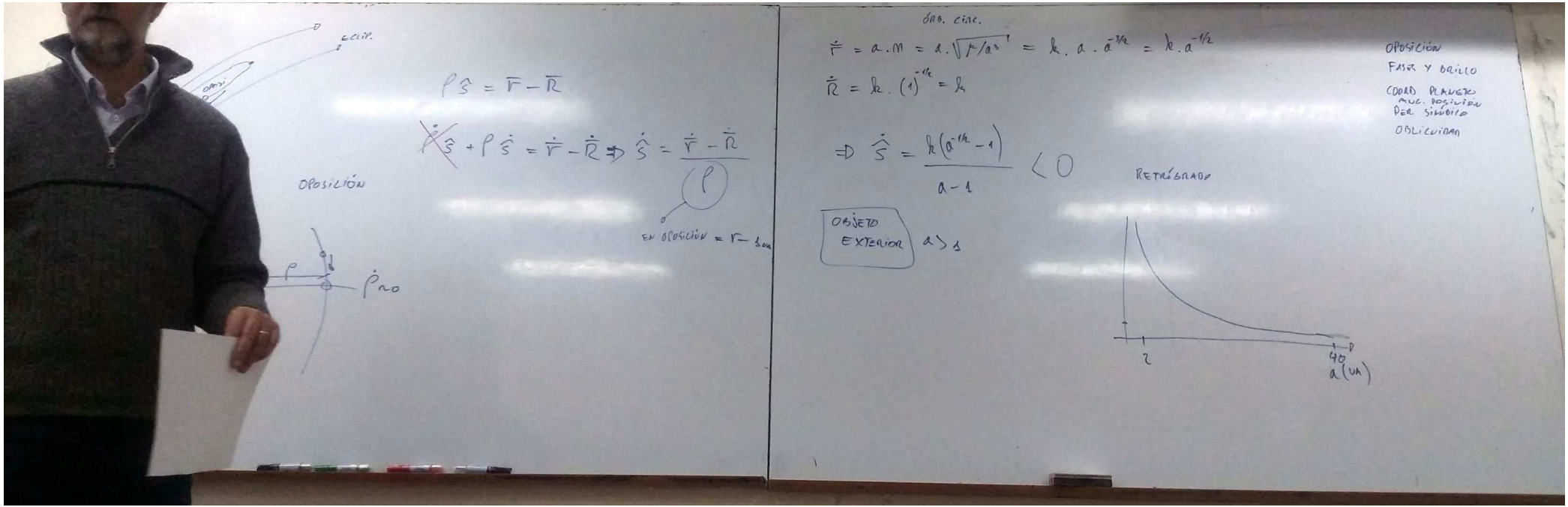
Astronomia Fundamental 2018 - clase 17



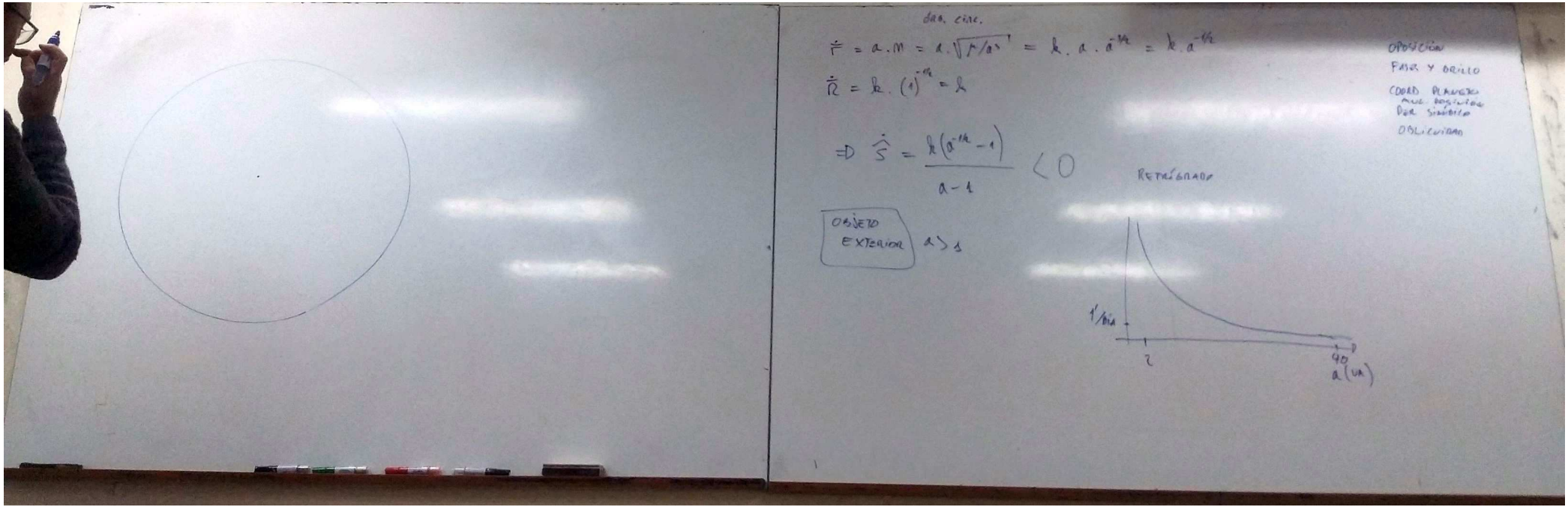
Astronomia Fundamental 2018 - clase 17



Astronomia Fundamental 2018 - clase 17



Astronomia Fundamental 2018 - clase 17



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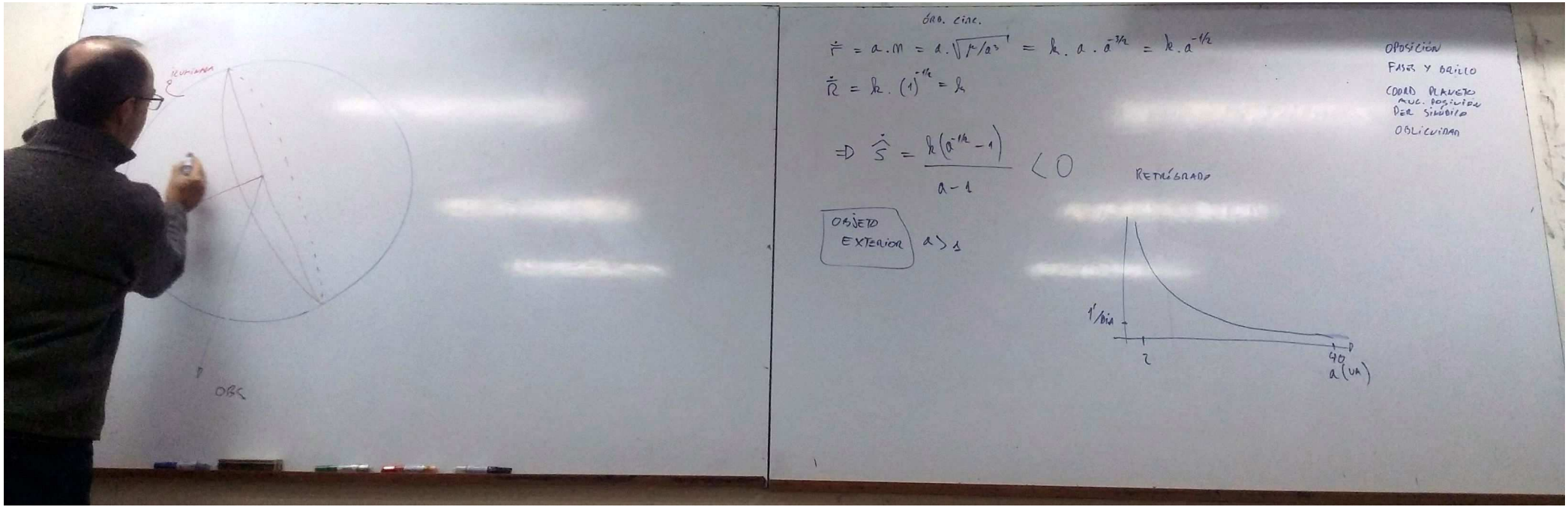
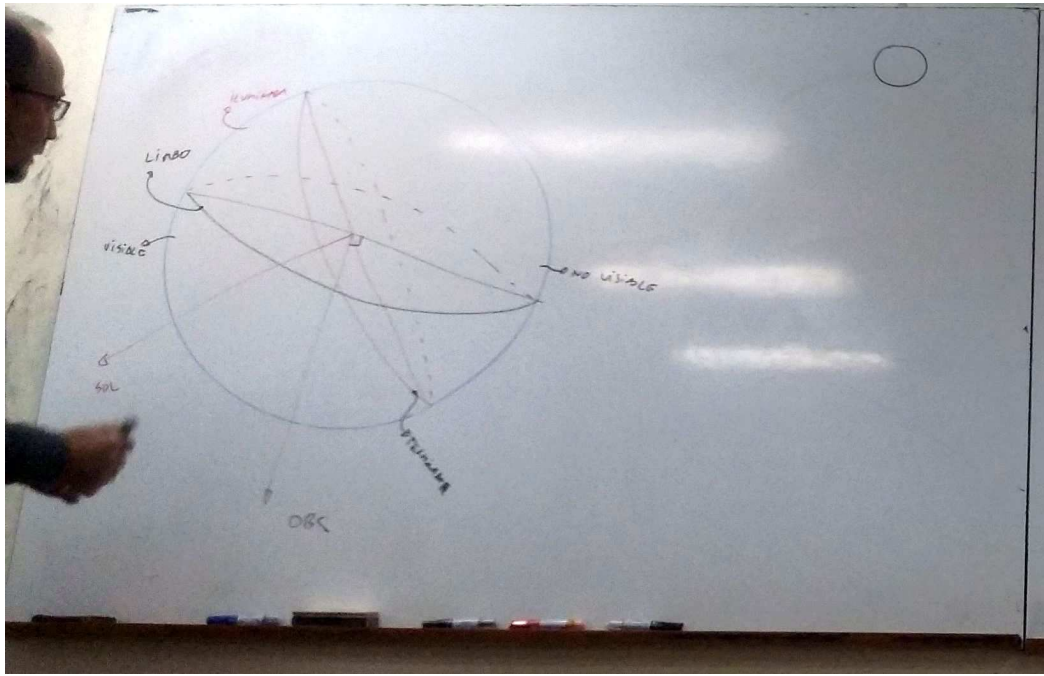


Astronomia Fundamental 2018 - clase 17



Órb. circ.

$\dot{r} = a \cdot n = a \cdot \sqrt{\mu / a^3} = k \cdot a \cdot a^{-3/2} = k \cdot a^{-1/2}$

$\dot{R} = k \cdot (1)^{-1/2} = k$

$\Rightarrow \dot{\hat{S}} = \dfrac{k\left(a^{-1/2} - 1\right)}{a - 1} < 0$

OBJETO EXTERIOR $a > 1$

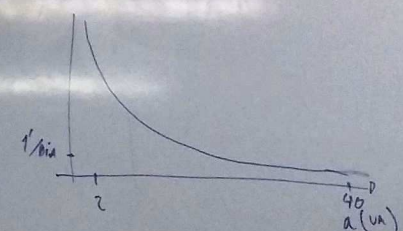
OPOSICIÓN

FASES Y BRILLO

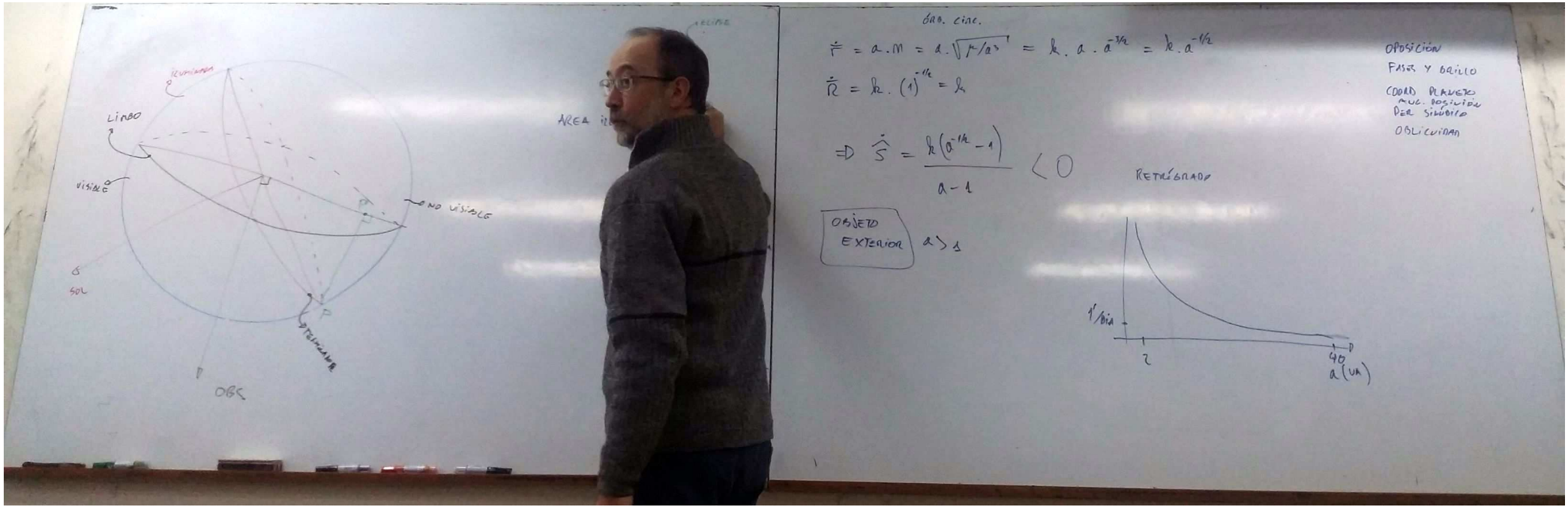
COORD. PLANETO MAG. POSICIÓN PER. SINÓDICO

OBLICUIDAD

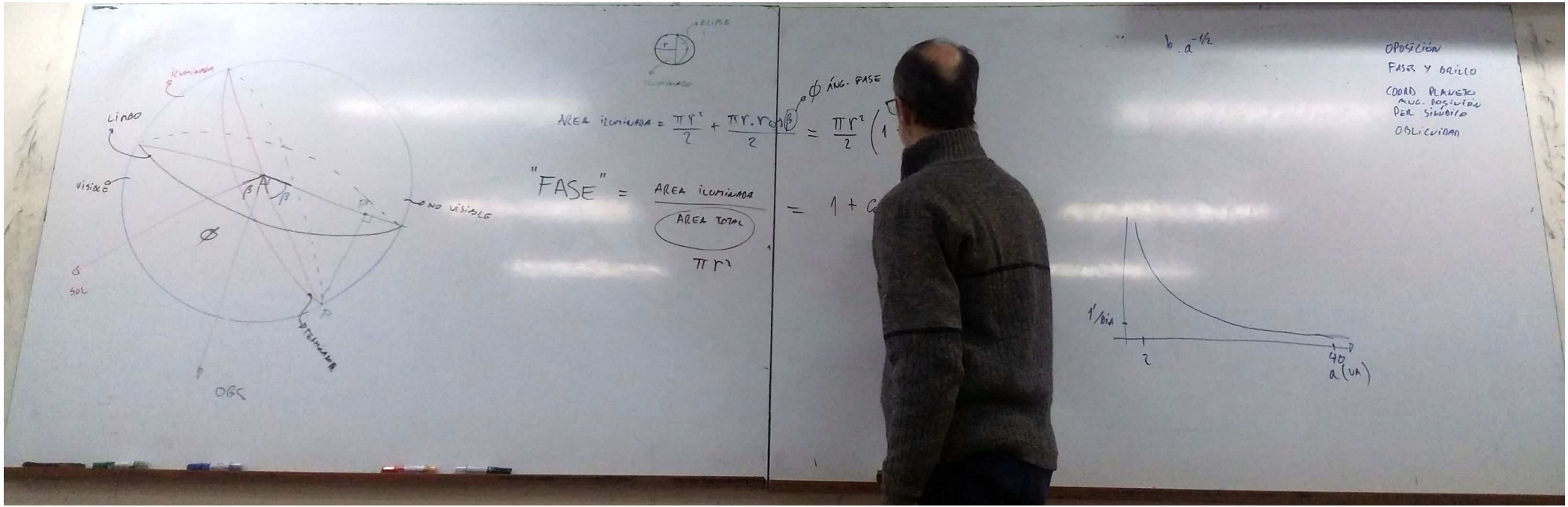
RETRÓGRADO



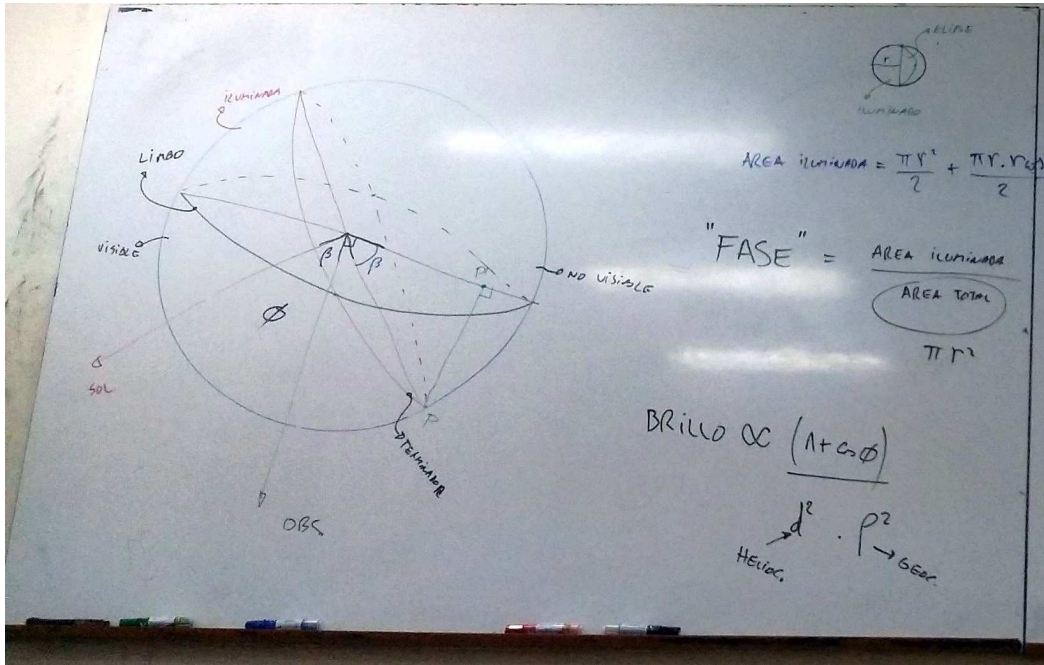
Astronomia Fundamental 2018 - clase 17



Astronomia Fundamental 2018 - clase 17



Astronomia Fundamental 2018 - clase 17



$$\text{AREA iluminada} = \frac{\pi r^2}{2} + \frac{\pi r \cdot r \cos\phi}{2} = \frac{\pi r^2}{2}(1 + \cos\phi)$$

$$\text{"FASE"} = \frac{\text{AREA iluminada}}{\text{AREA TOTAL}} = \frac{\frac{\pi r^2}{2}(1+\cos\phi)}{\pi r^2} = \frac{(1+\cos\phi)}{2}$$

- $0 \Rightarrow \phi = 180°$ (NUEVA)
- $1 \Rightarrow \phi = 0°$ (LLENA)

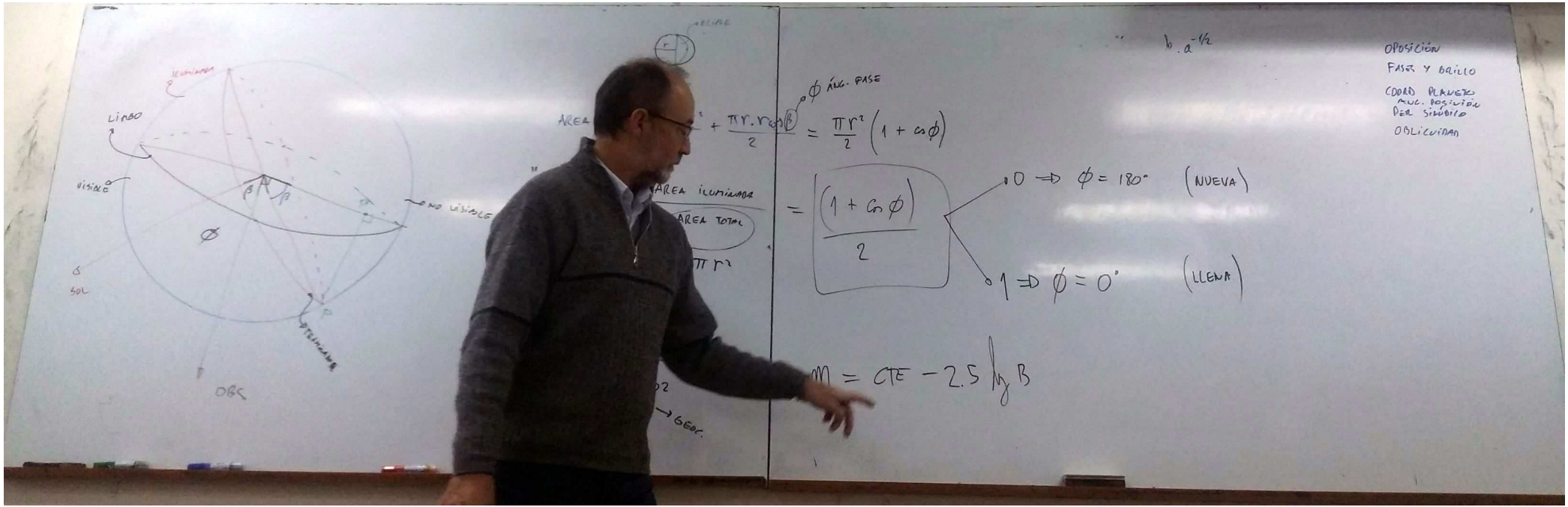
$$\text{BRILLO} \propto \frac{(1+\cos\phi)}{d^2 \cdot \rho^2}$$

d^2 → HELIOC. ρ^2 → GEOC.

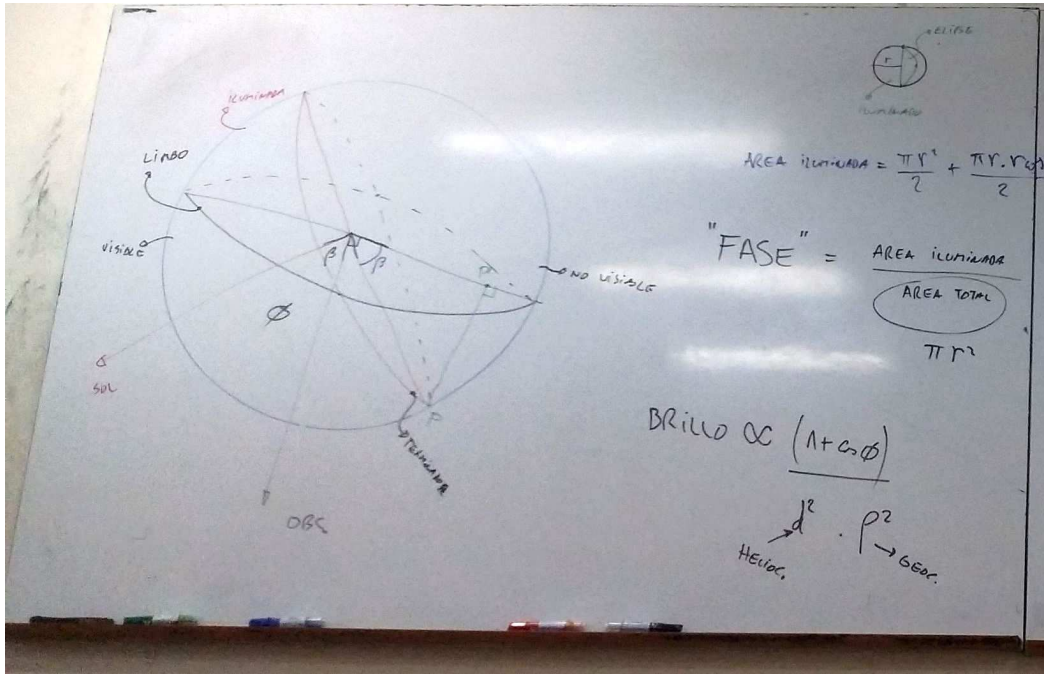
$b \; a^{-1/2}$

OPOSICIÓN
FASE Y BRILLO
COORD. PLANETO. ang. positivos POR SIMETRÍA
OBLICUIDAD

Astronomia Fundamental 2018 - clase 17



Astronomia Fundamental 2018 - clase 17



$$\text{AREA iluminada} = \frac{\pi r^2}{2} + \frac{\pi r \cdot r \cos\phi}{2} = \frac{\pi r^2}{2}(1 + \cos\phi)$$

ϕ ÁNG. FASE

$$\text{"FASE"} = \frac{\text{AREA iluminada}}{\text{AREA TOTAL}} = \frac{\frac{\pi r^2}{2}(1+\cos\phi)}{\pi r^2} = \frac{(1+\cos\phi)}{2}$$

$0 \Rightarrow \phi = 180°$ (NUEVA)

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$$\text{BRILLO} \propto \frac{(1+\cos\phi)}{d^2 \cdot \rho^2}$$

d^2 → HELIOC. ρ^2 → GEOC.

$$m = CTE - 2.5 \log B$$

$b \cdot a^{-1/2}$

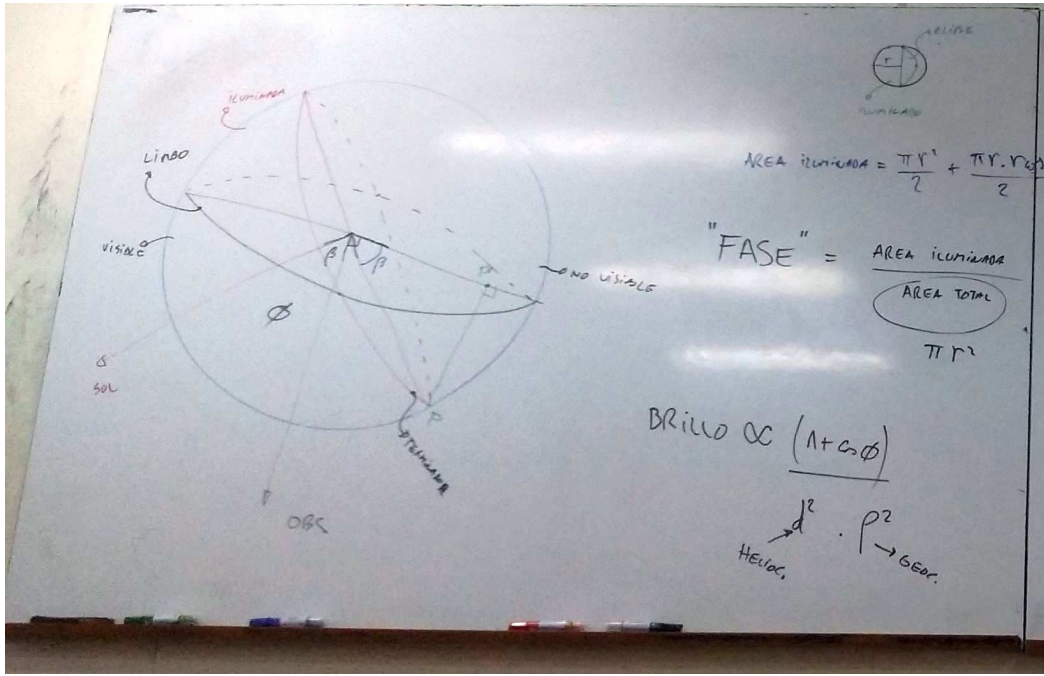
OPOSICIÓN

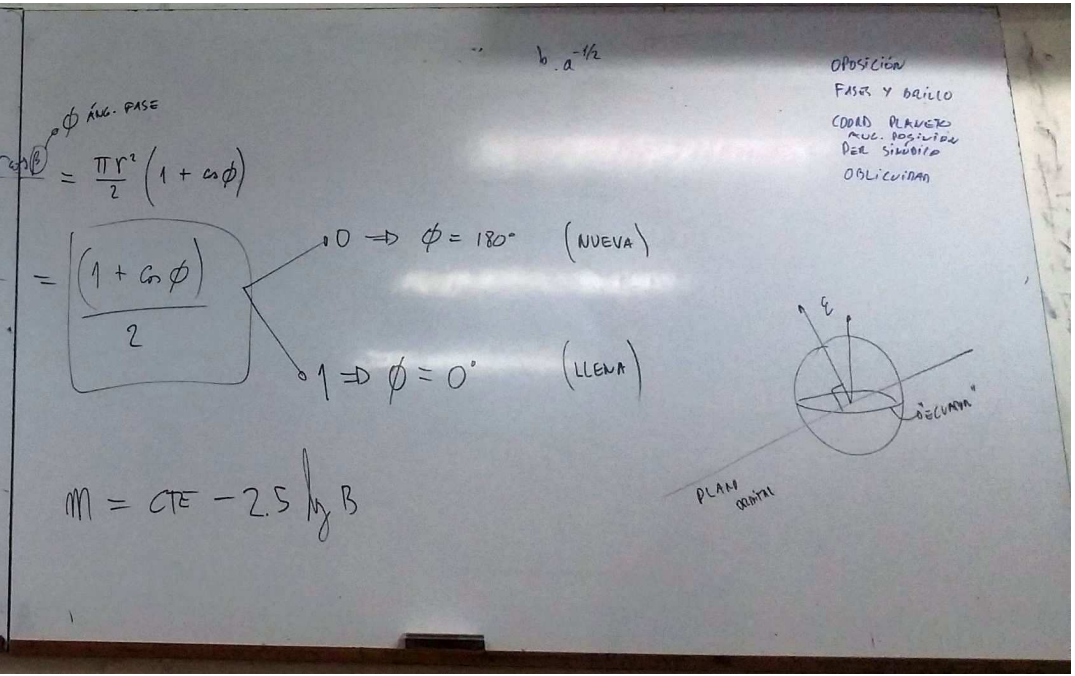
FASE Y BRILLO

COORD. PLANETO ANG. POSICIÓN DEL SINUOIDE

OBLICUIDAD

Astronomia Fundamental 2018 - clase 17





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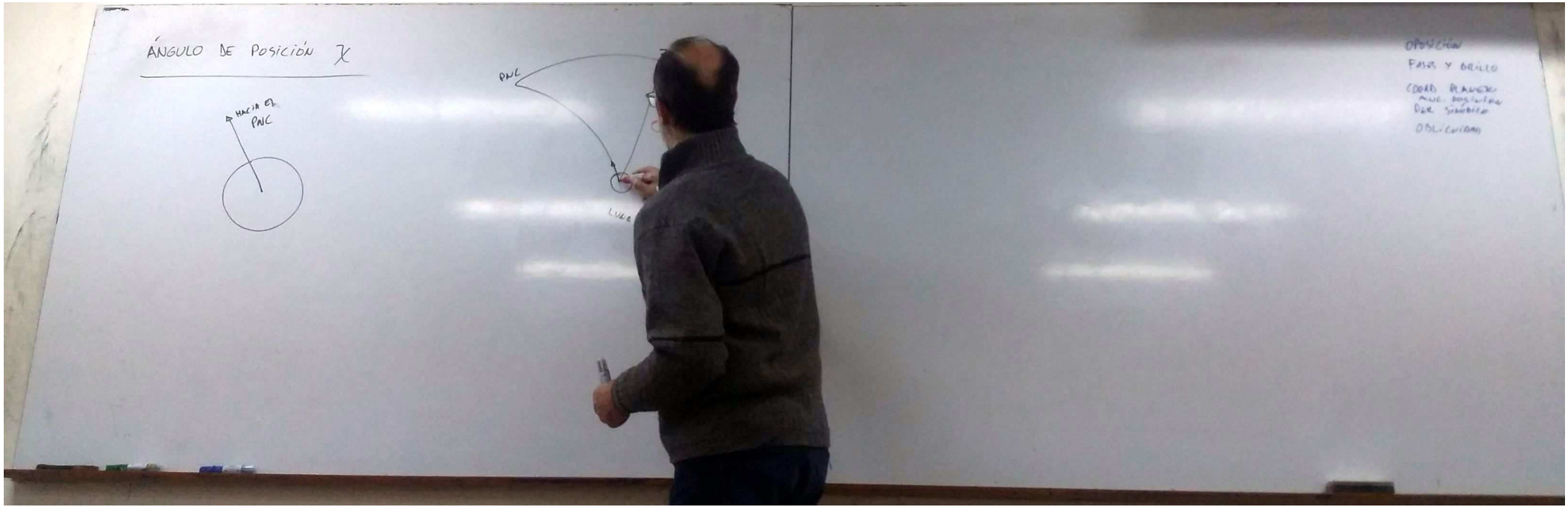

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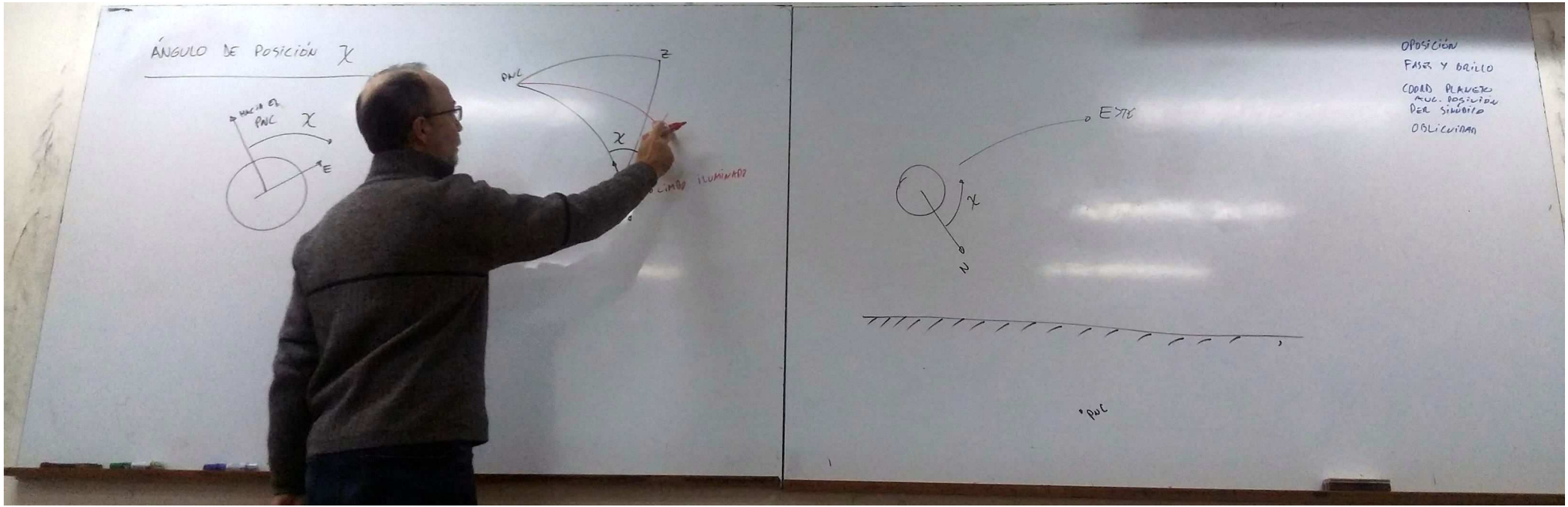

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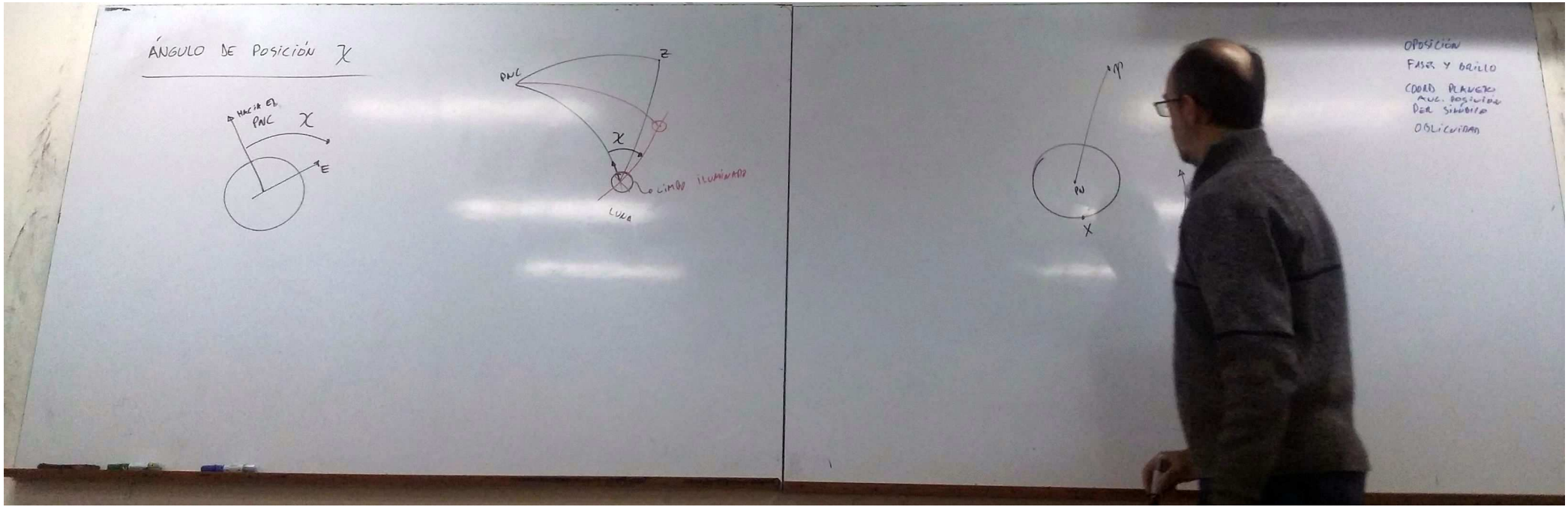

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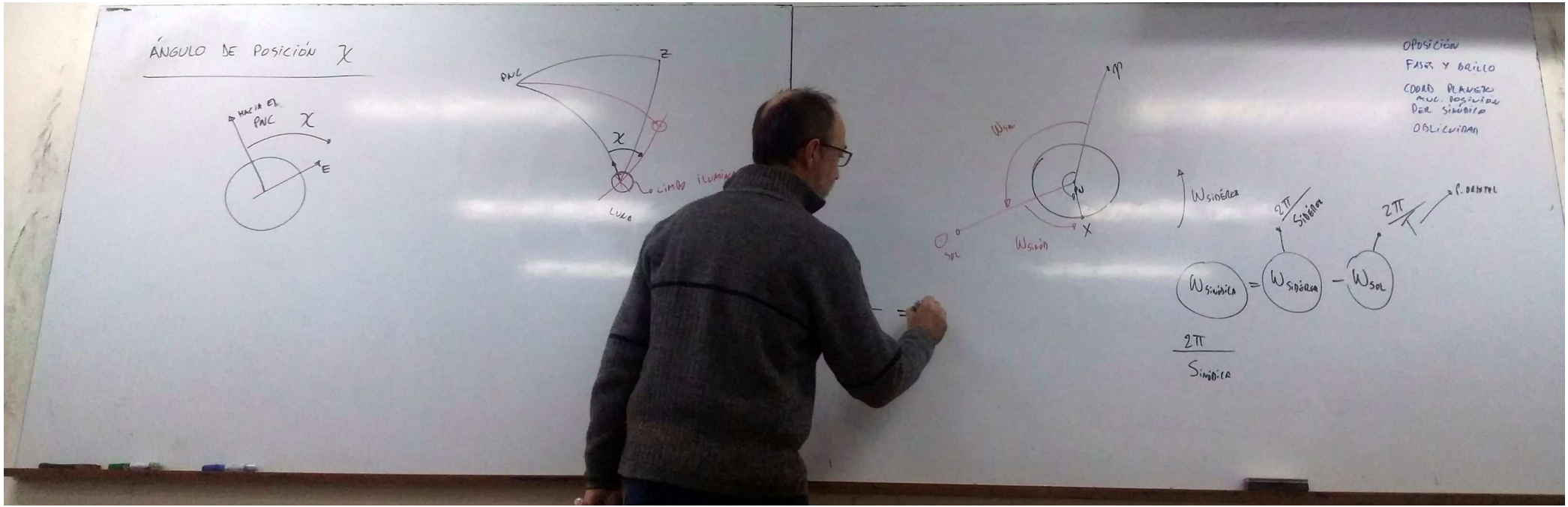

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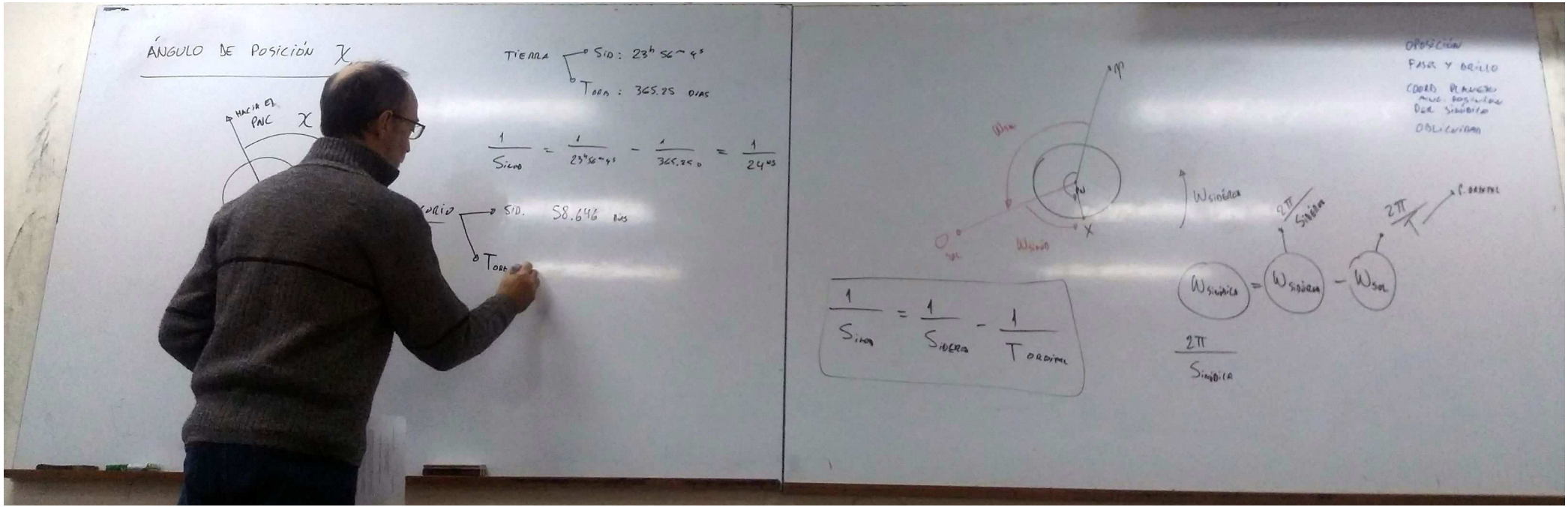
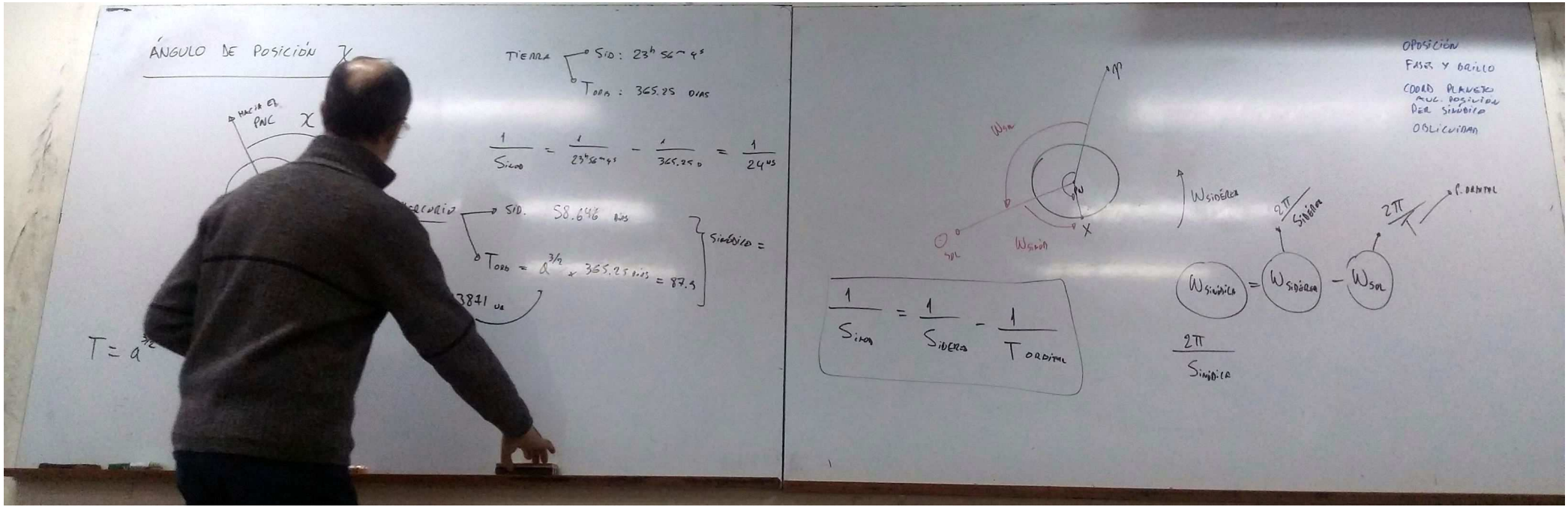


Astronomia Fundamental 2018 - clase 17



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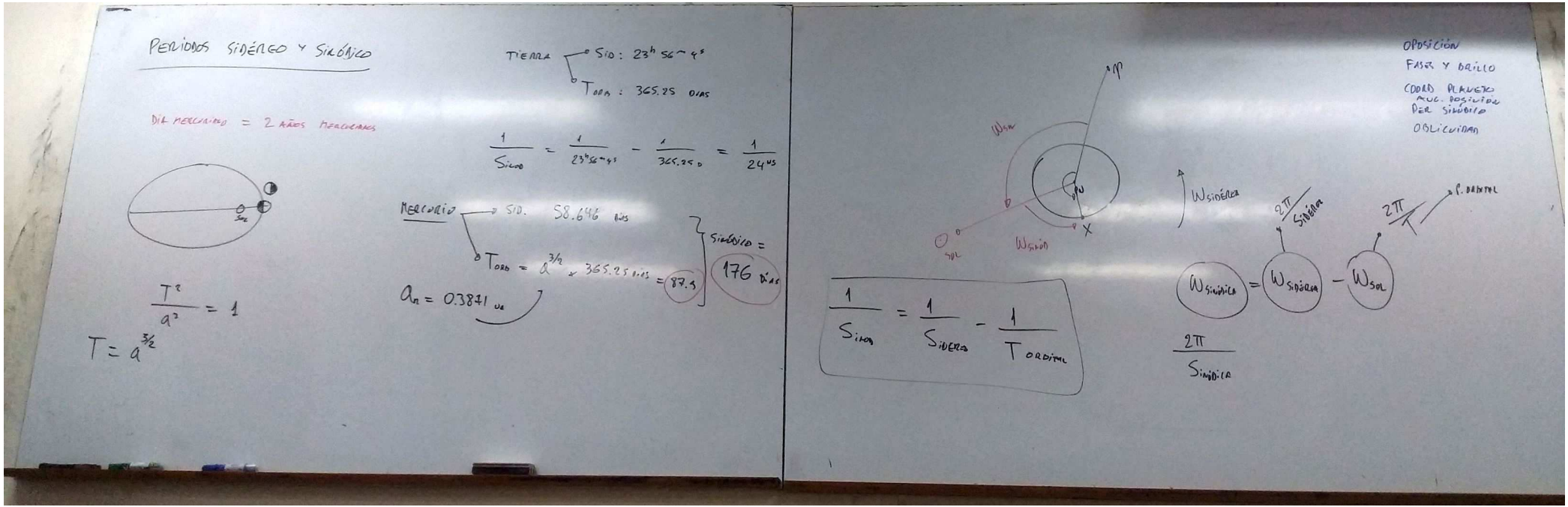

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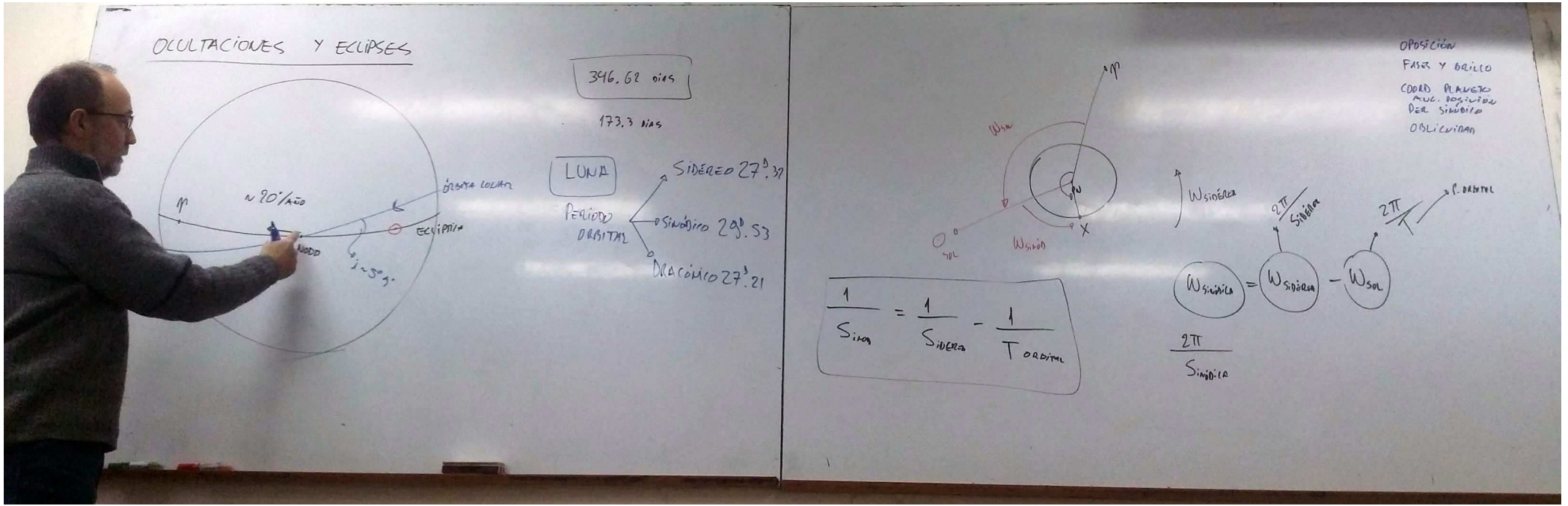

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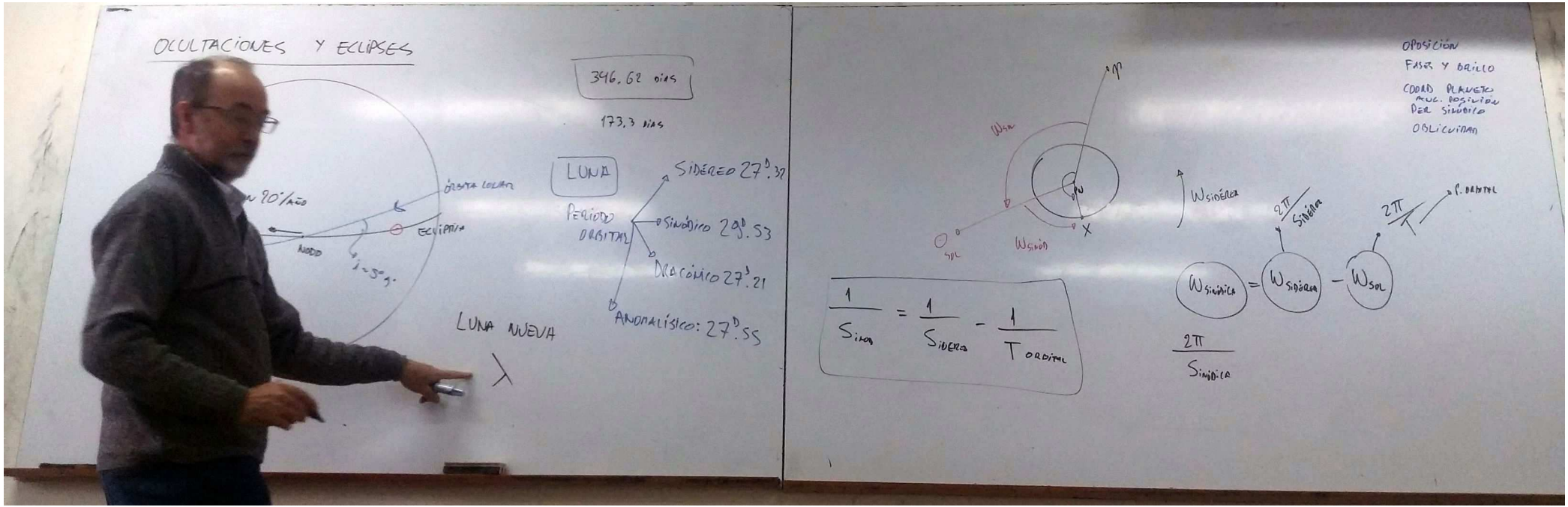

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