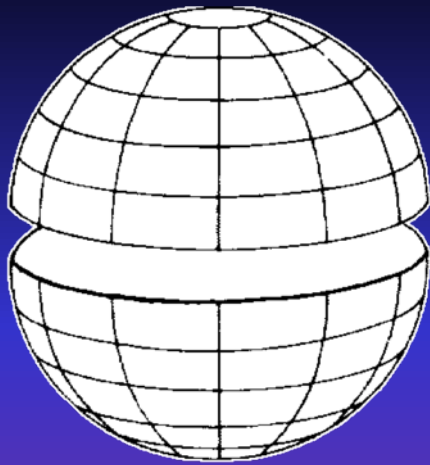


*Astronomia de Posição*  
*2º semestre - 2022*

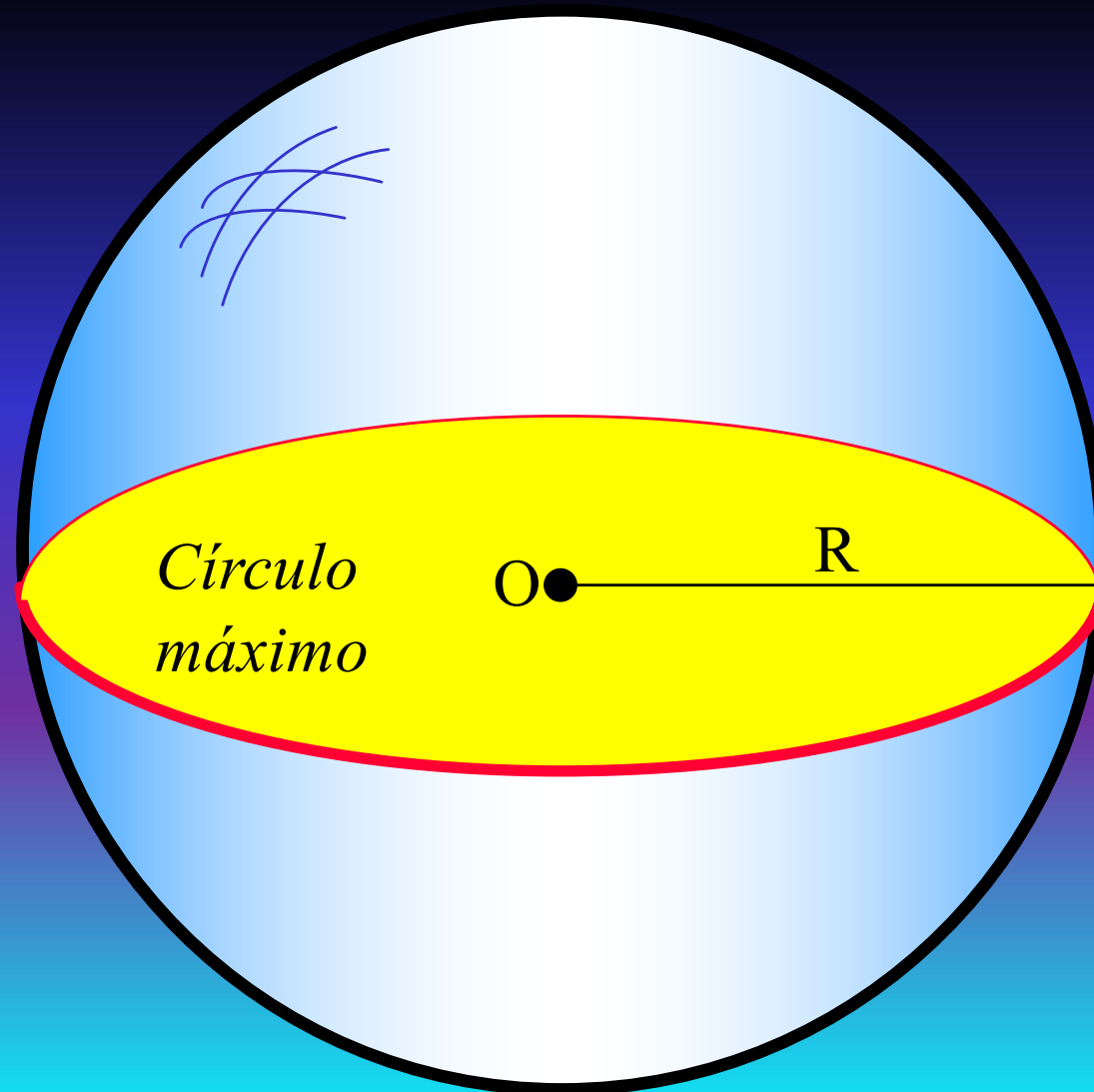
*Aula\_4 – 24/08/2022*

*Conceitos de geometria esférica e  
elementos da esfera celeste*

# *grande círculo ou círculo máximo*



*Círculo  
máximo*

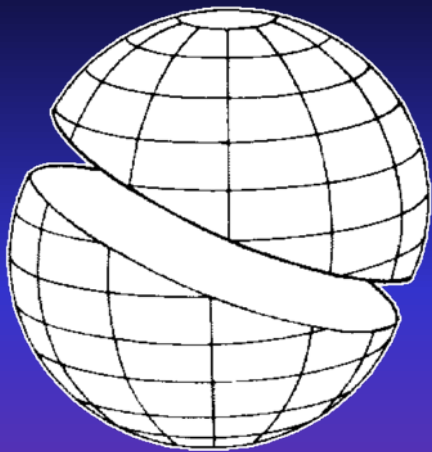


*Círculo  
máximo*

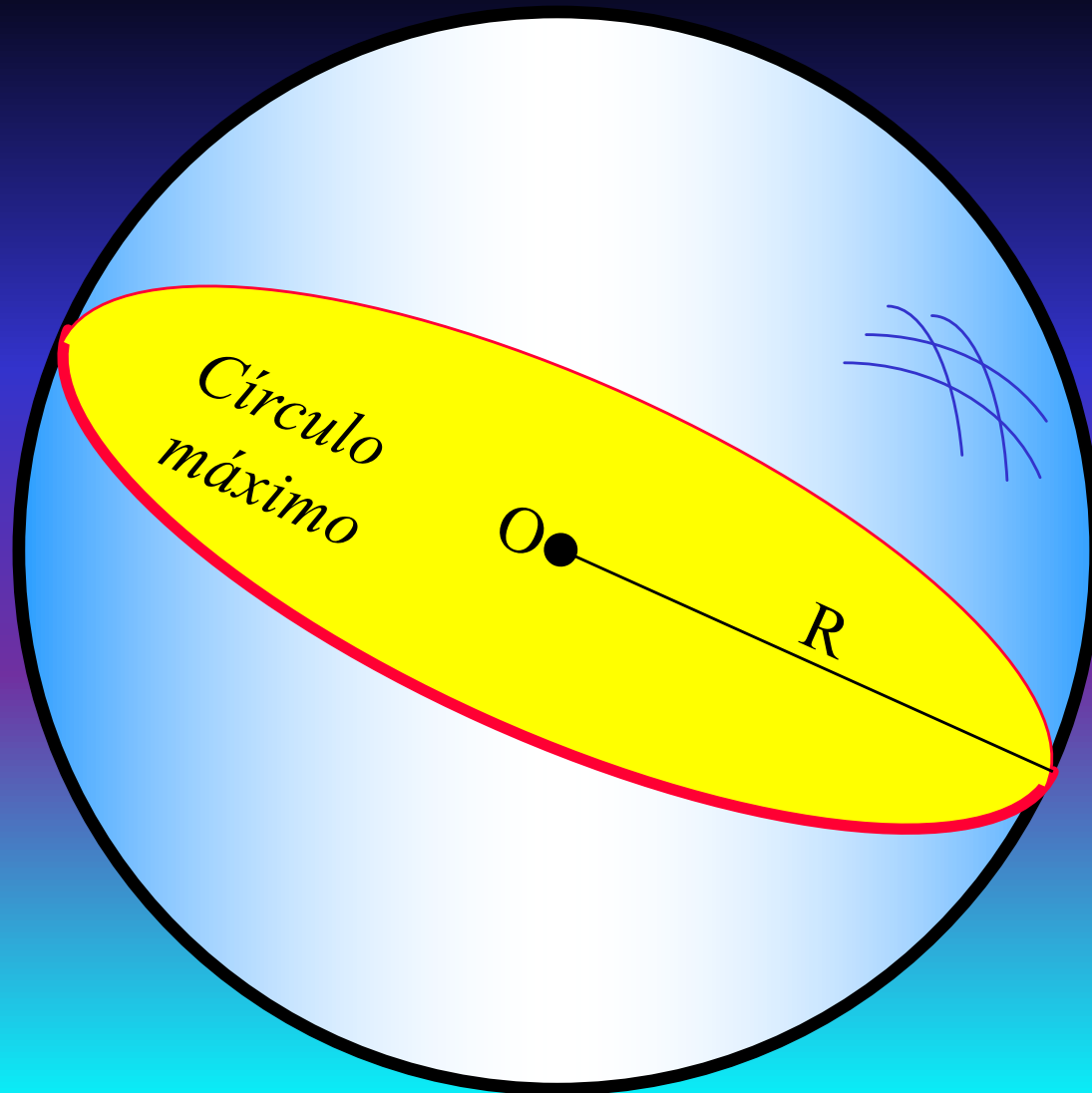
O

R

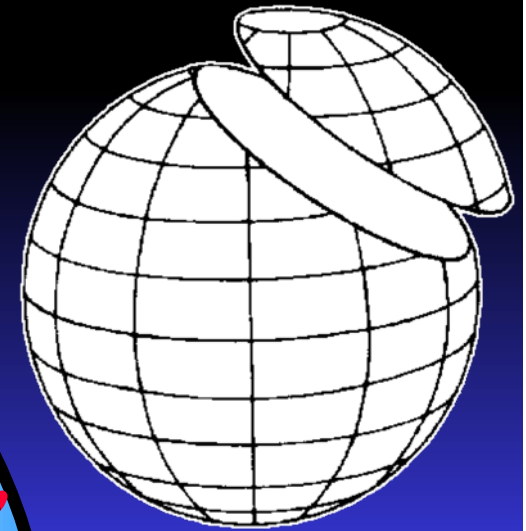
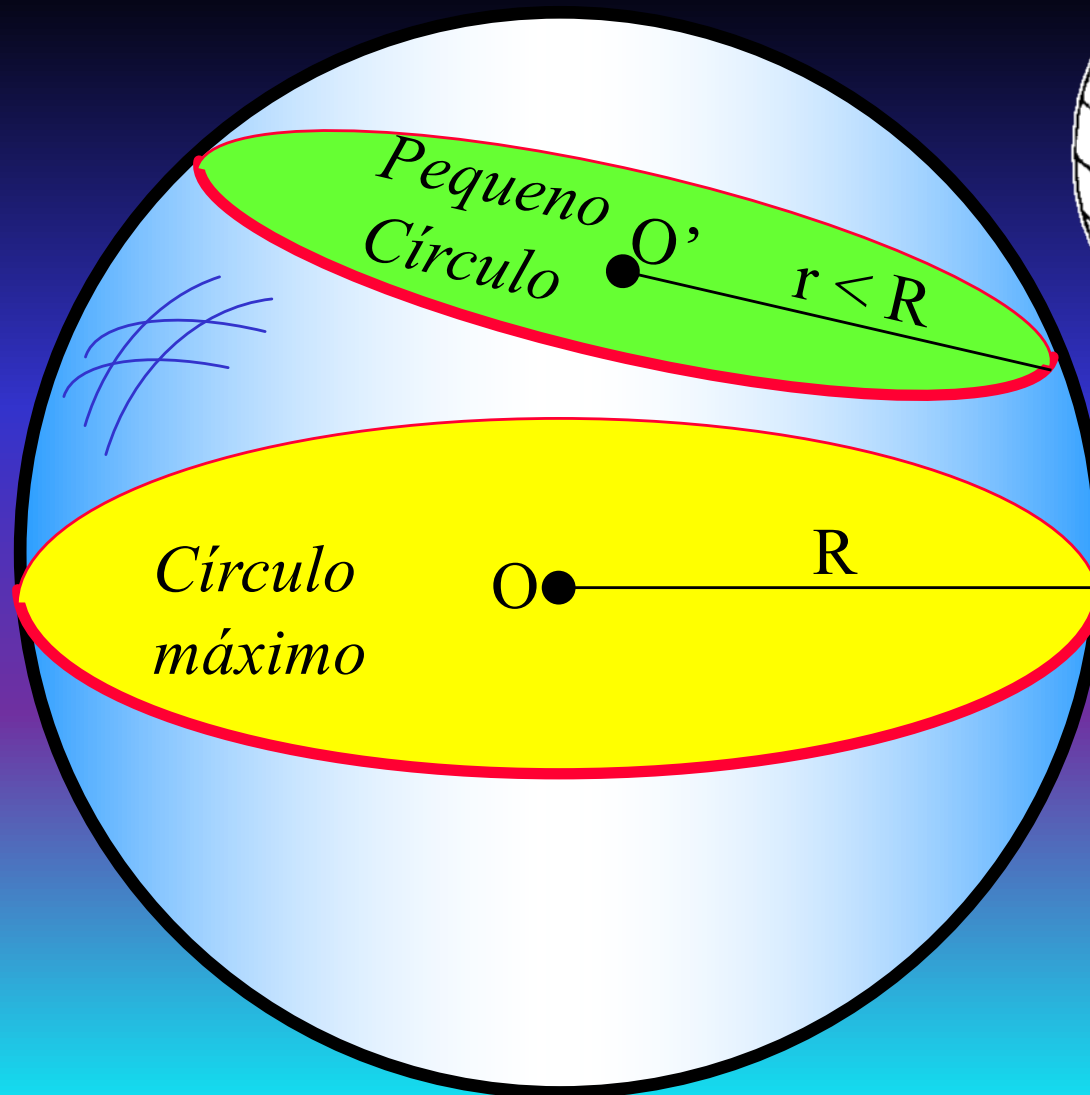
# *grande círculo ou círculo máximo*



*Círculo  
máximo*

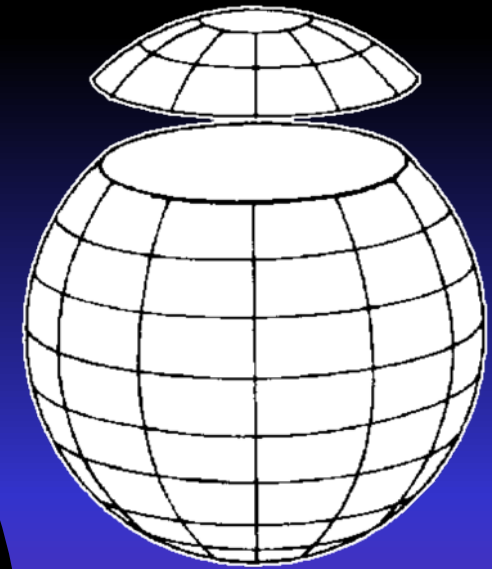
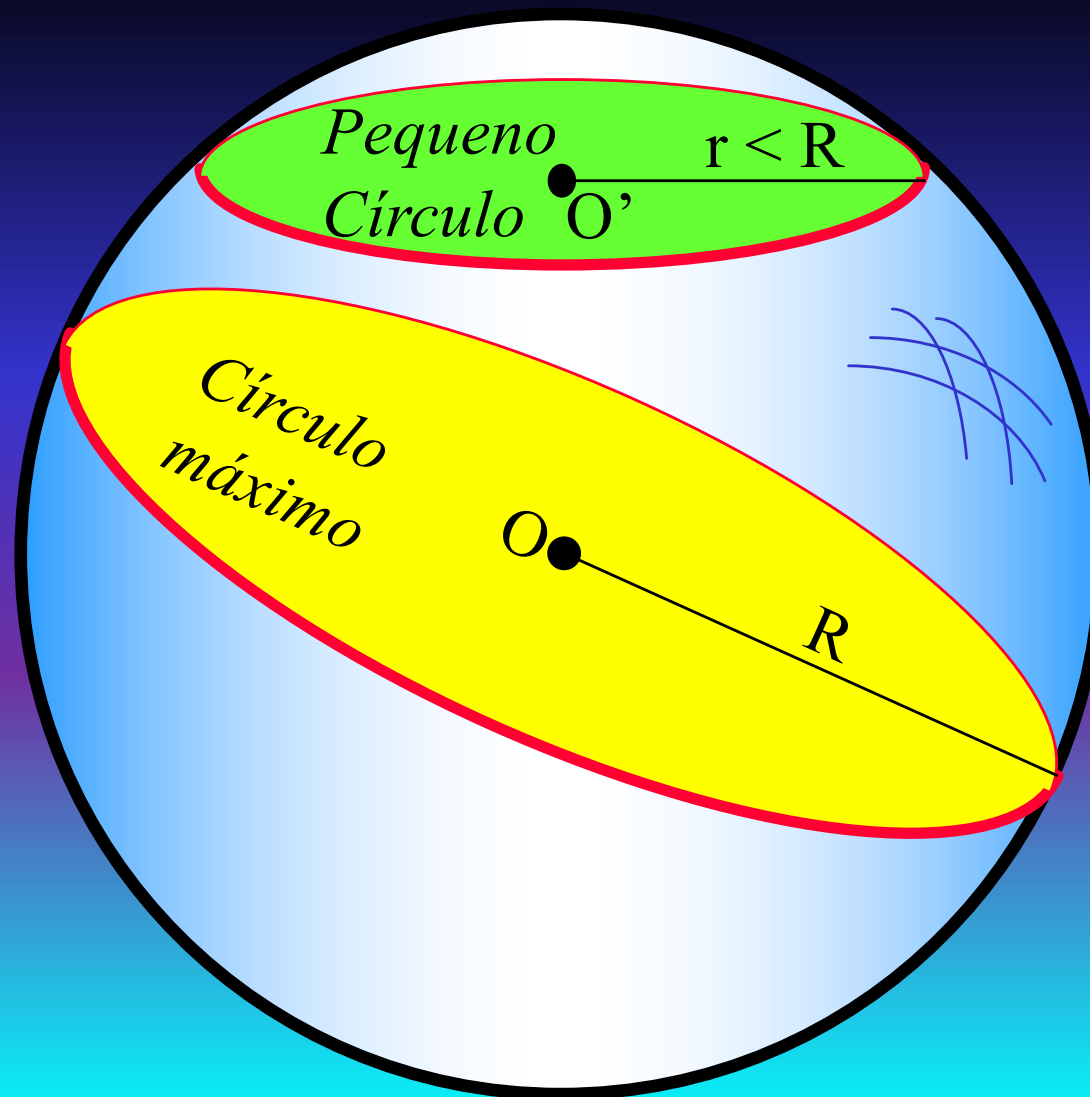


# *pequenos círculos*



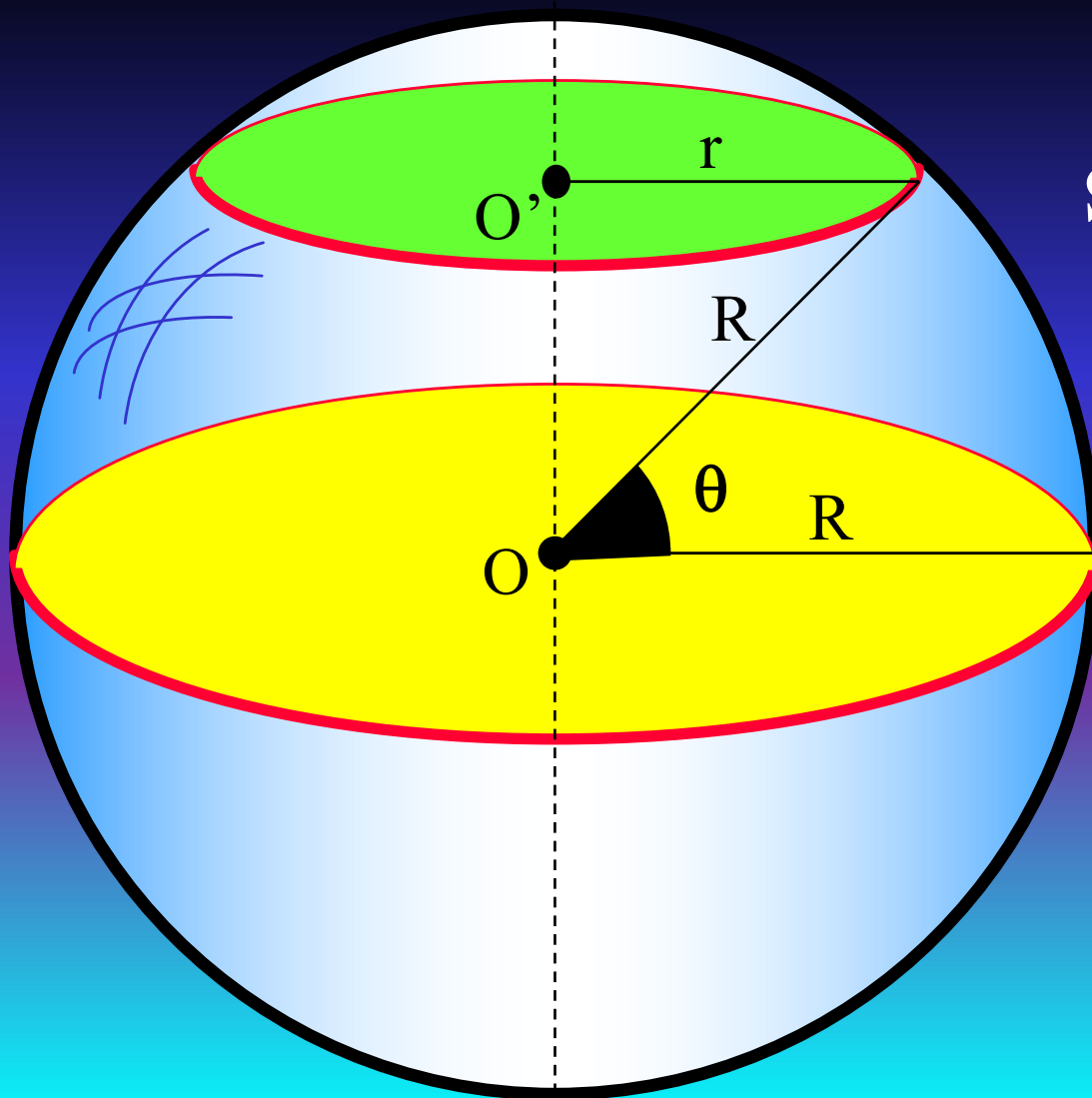
*Pequeno círculo*

# *pequenos círculos*



*Pequeno círculo*

# relação entre os raios “R” e “r”

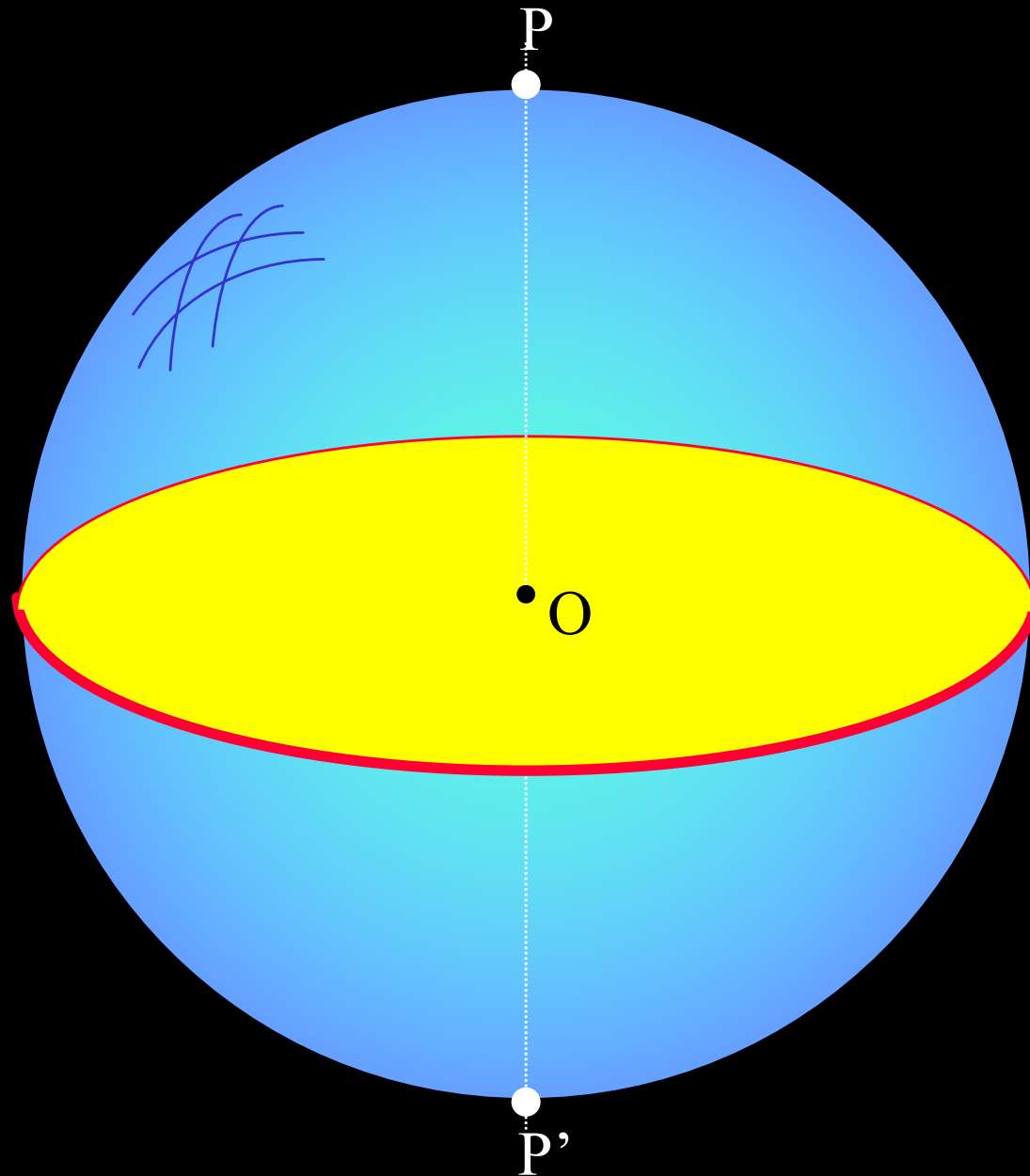


$$\text{sen}(90^\circ - \theta) = r/R$$

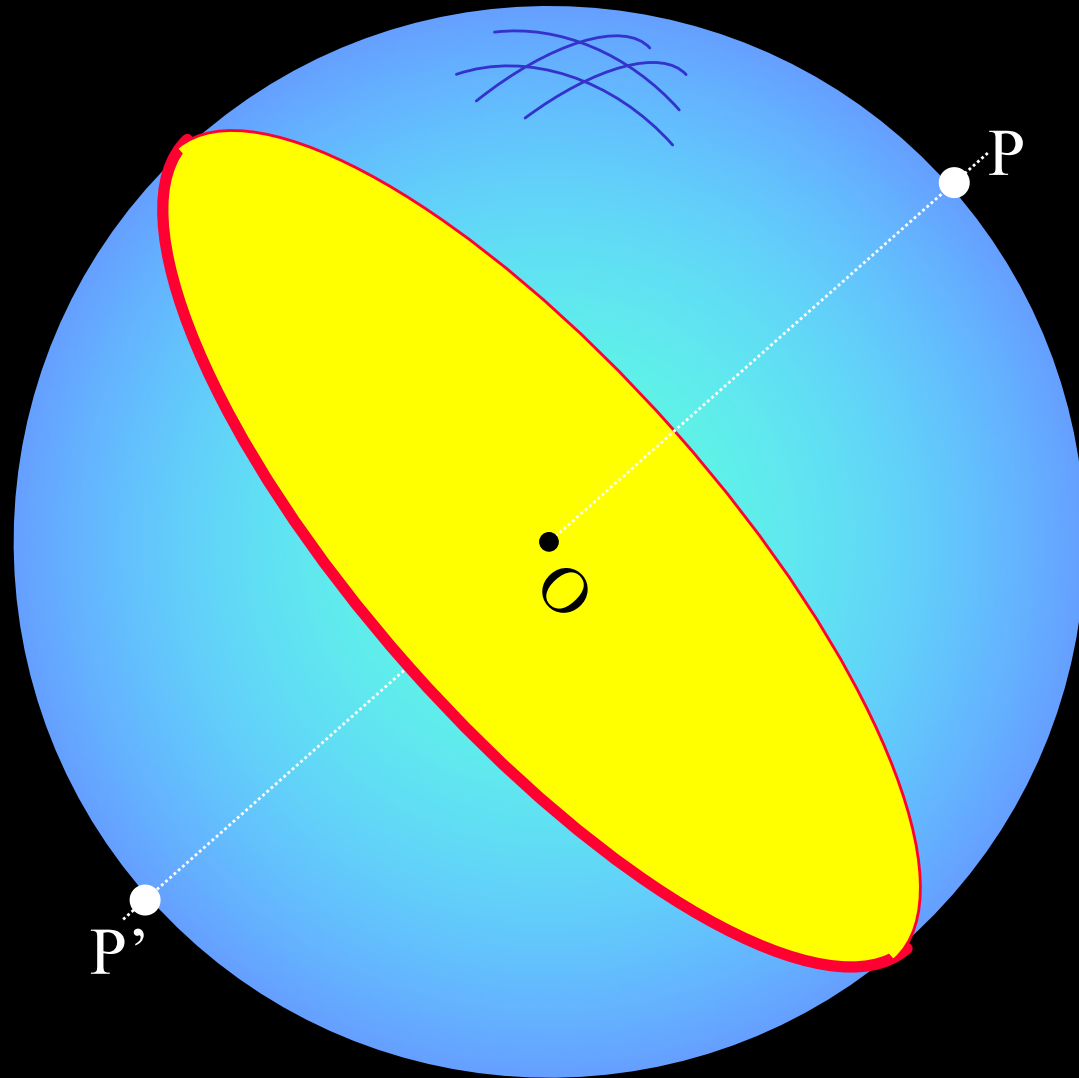


$$r = R \cdot \cos\theta$$

# *pólos de um grande círculo*

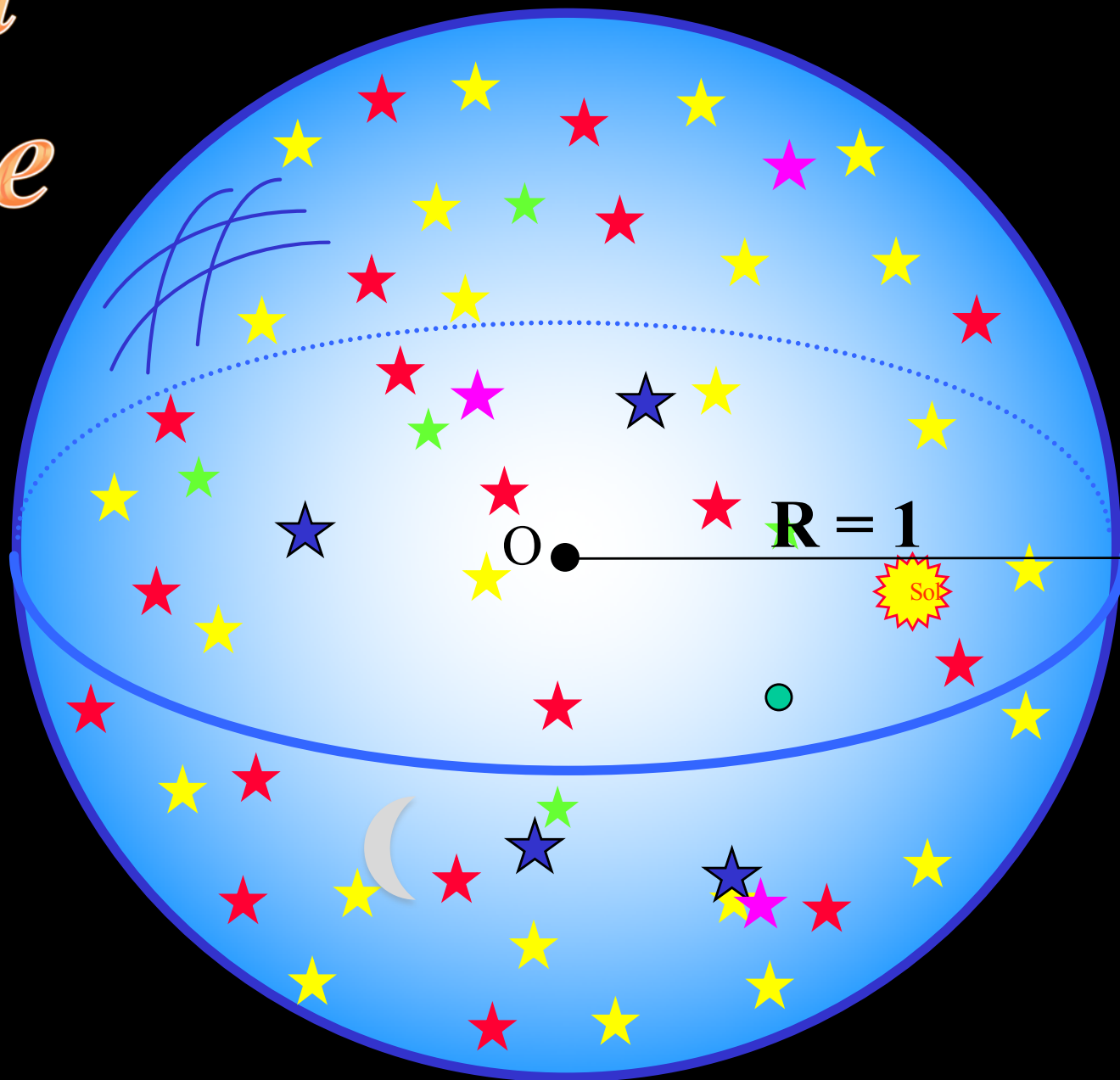


# *pólos de um grande círculo*

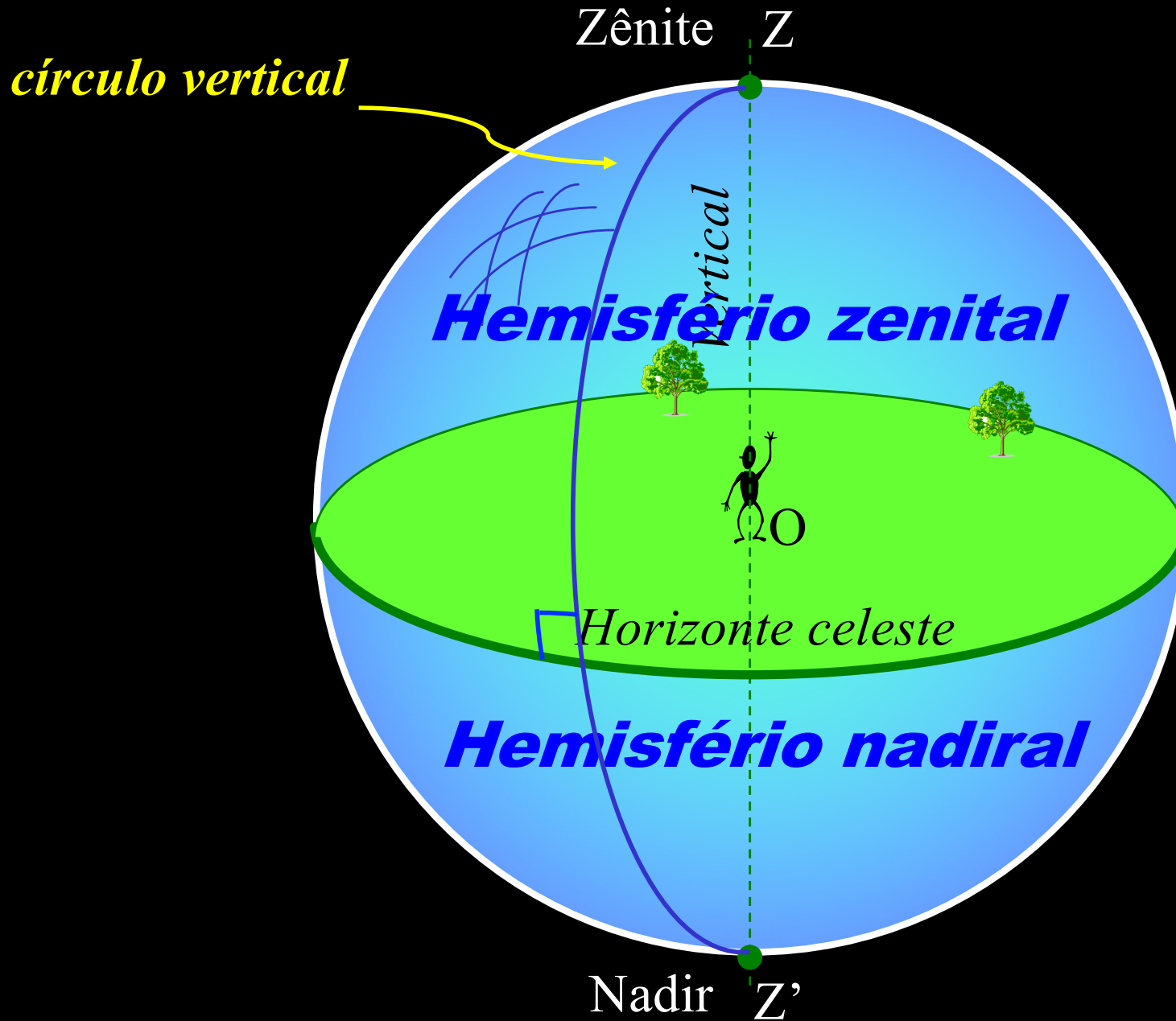




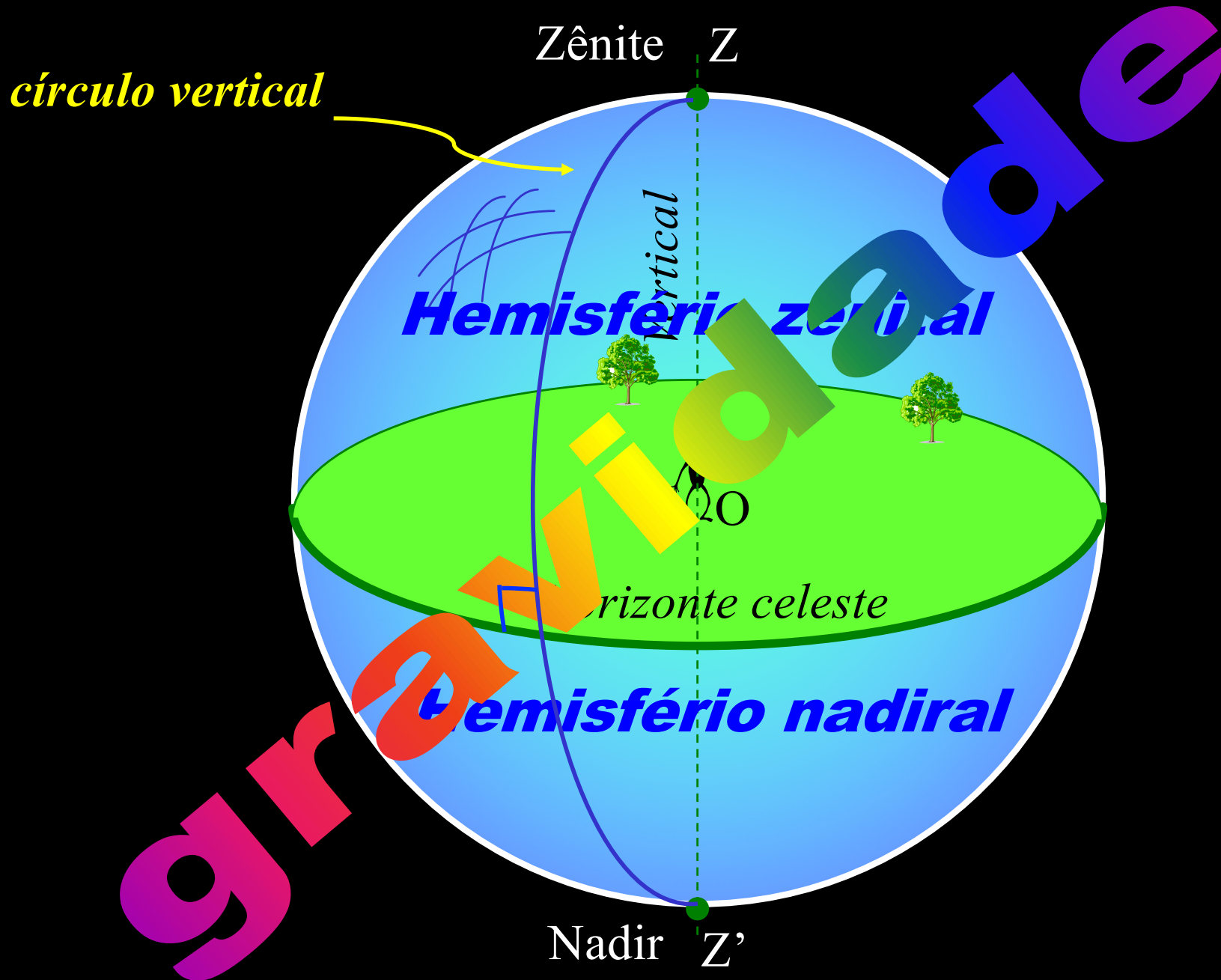
# *Esfera Celeste*



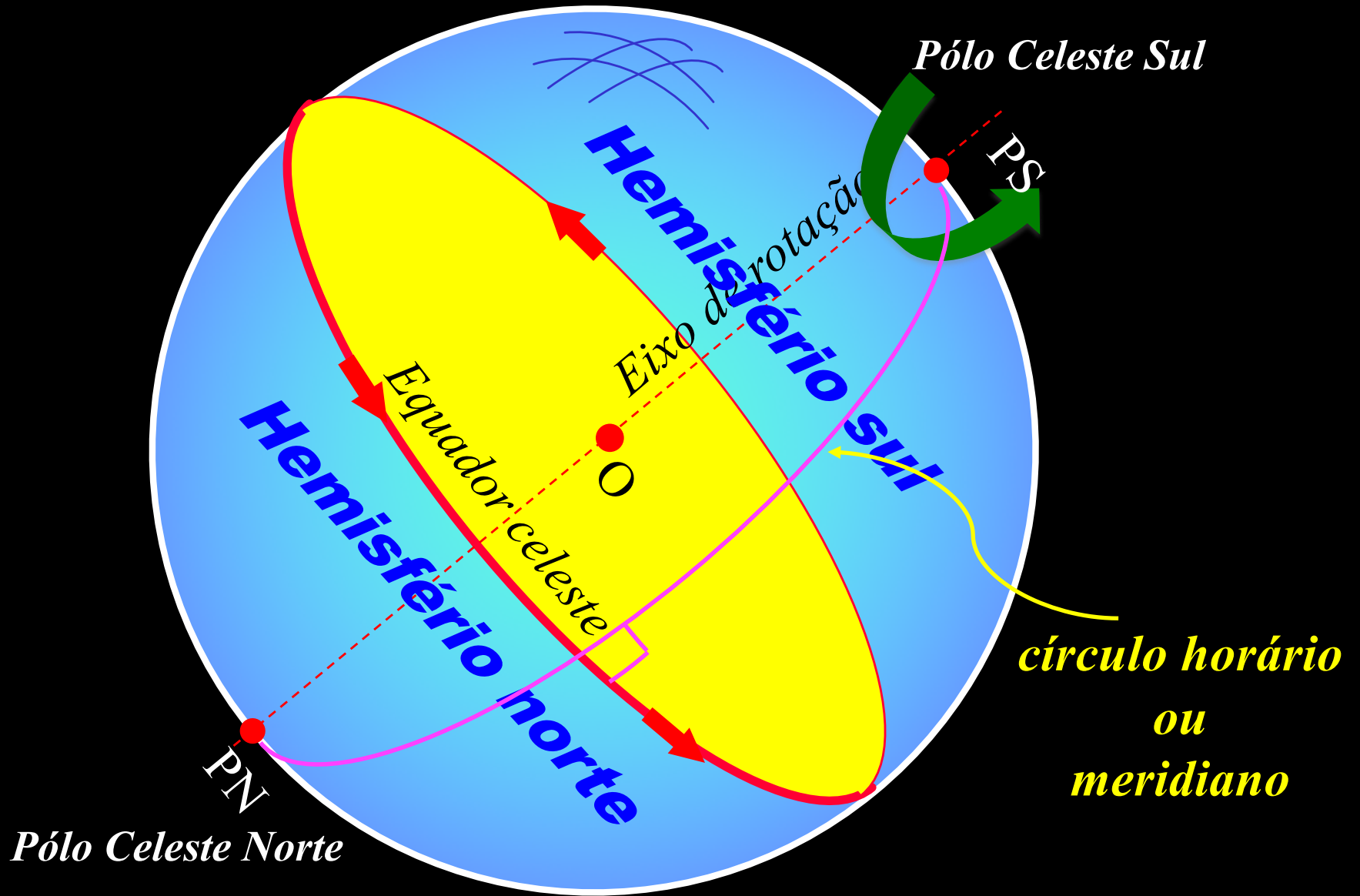
# *elementos da esfera celeste*



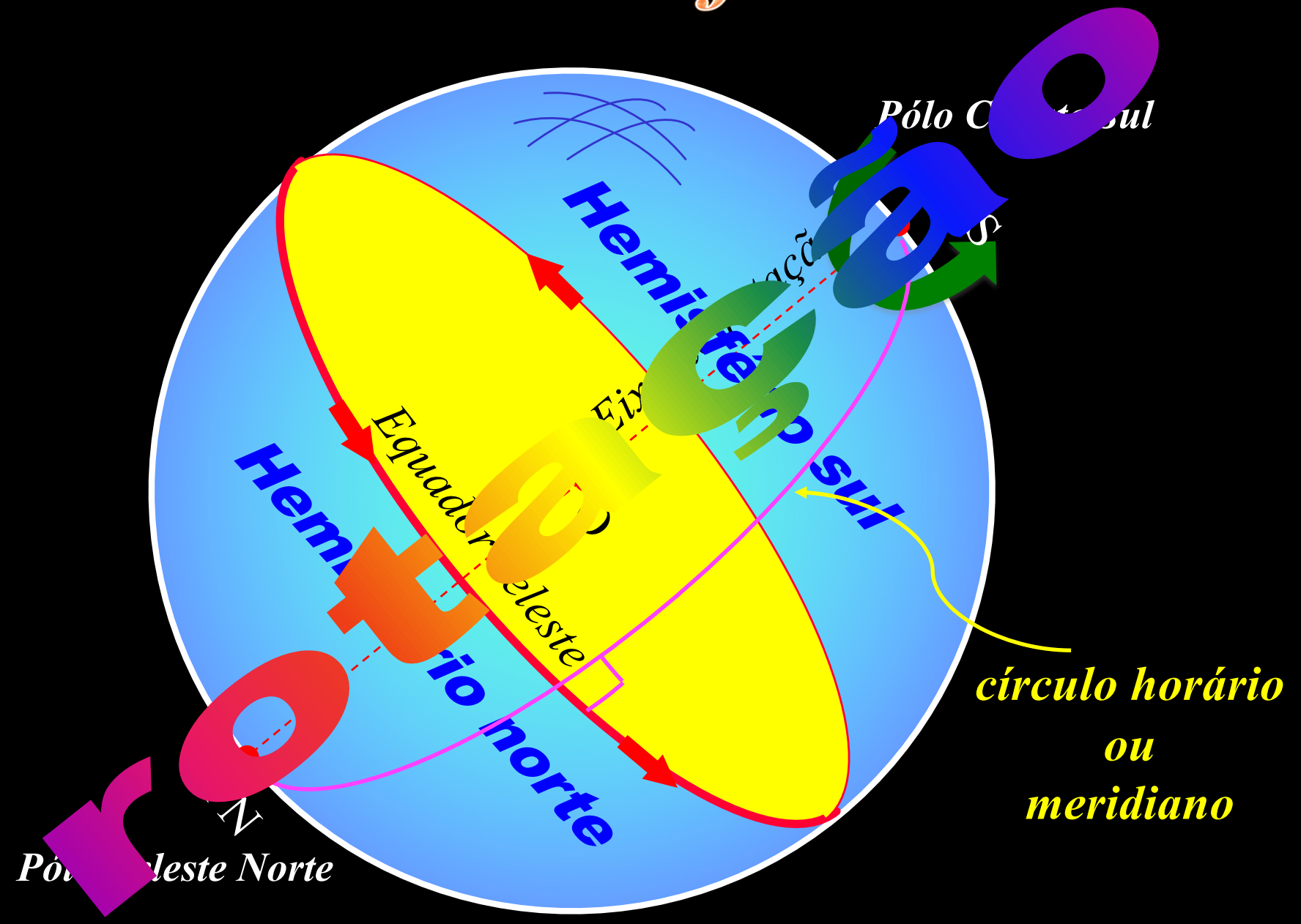
# *elementos da esfera celeste*



# *elementos da esfera celeste*

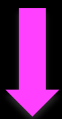


# elementos da esfera celeste



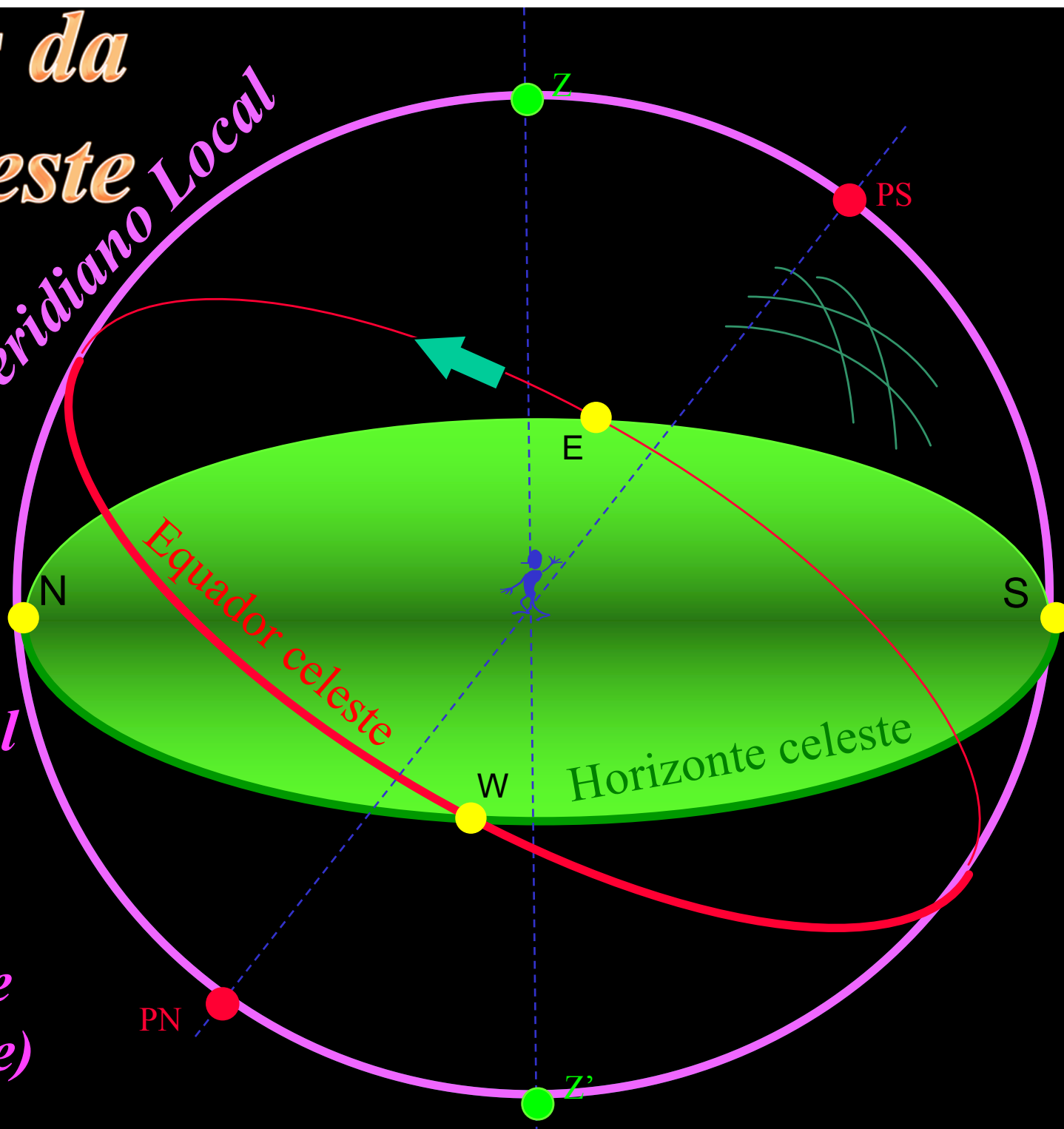
# *elementos da esfera celeste*

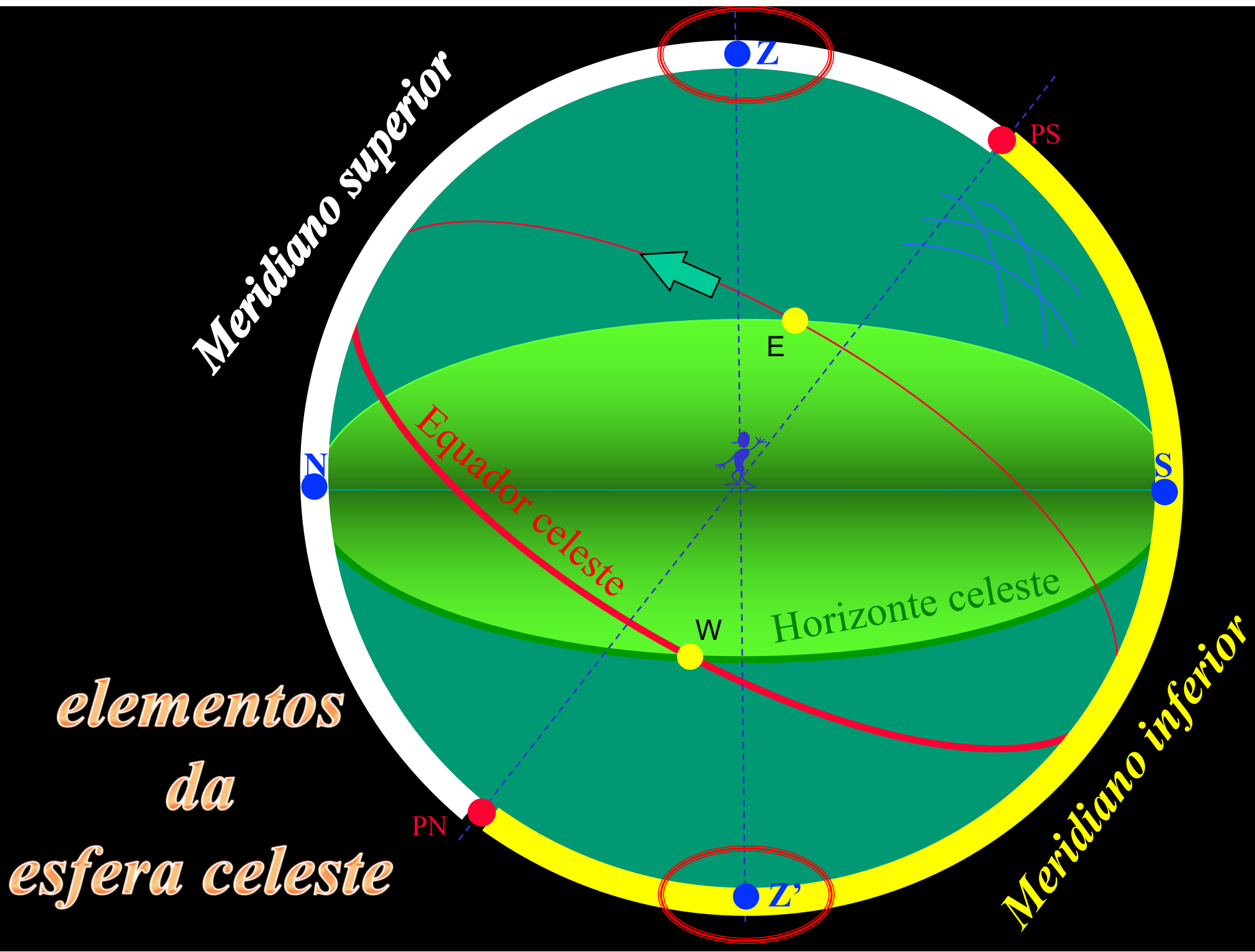
*Meridiano Local*



*hemisférios:  
oriental (leste) e  
occidental (oeste)*

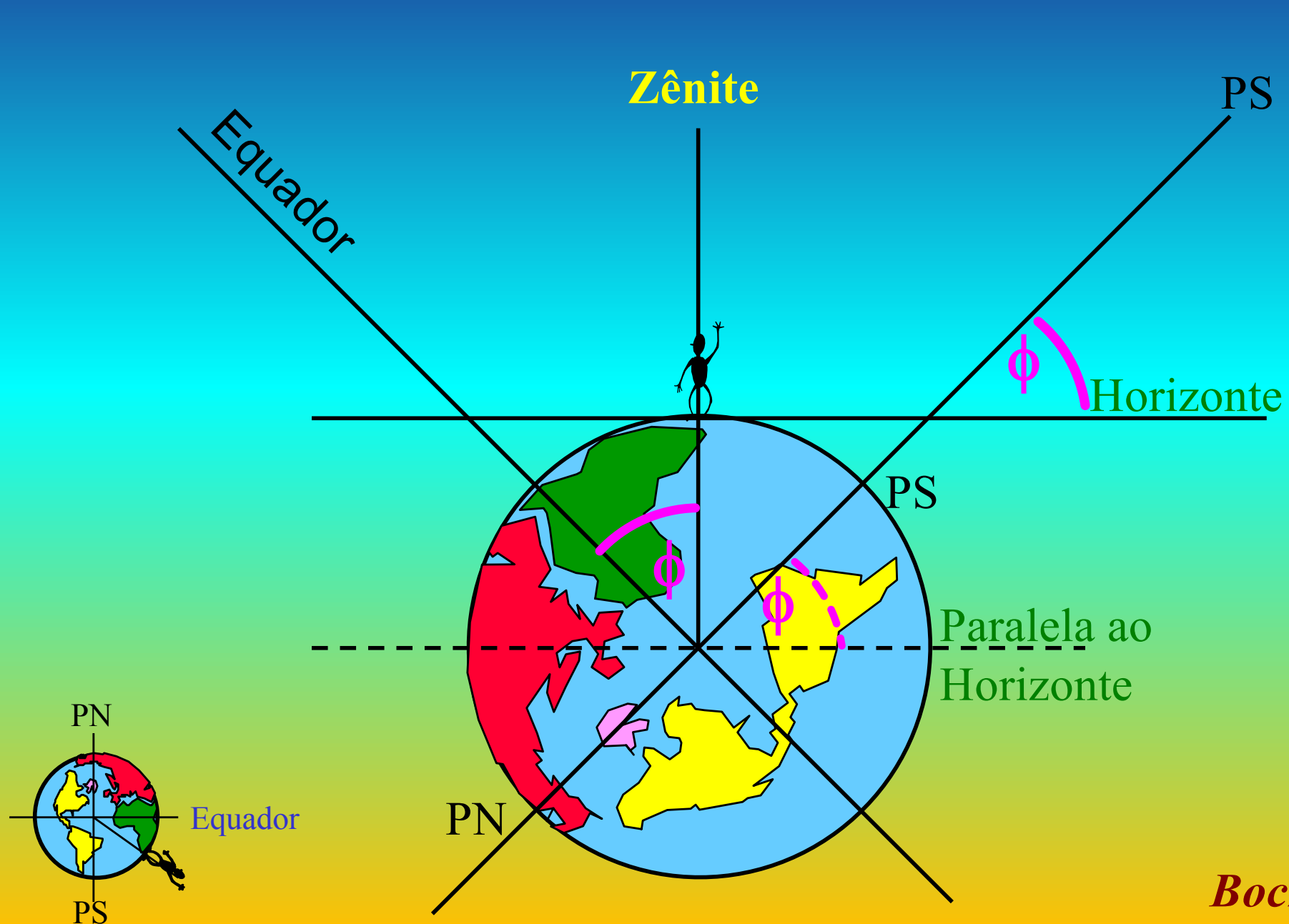
*Meridiano Local*





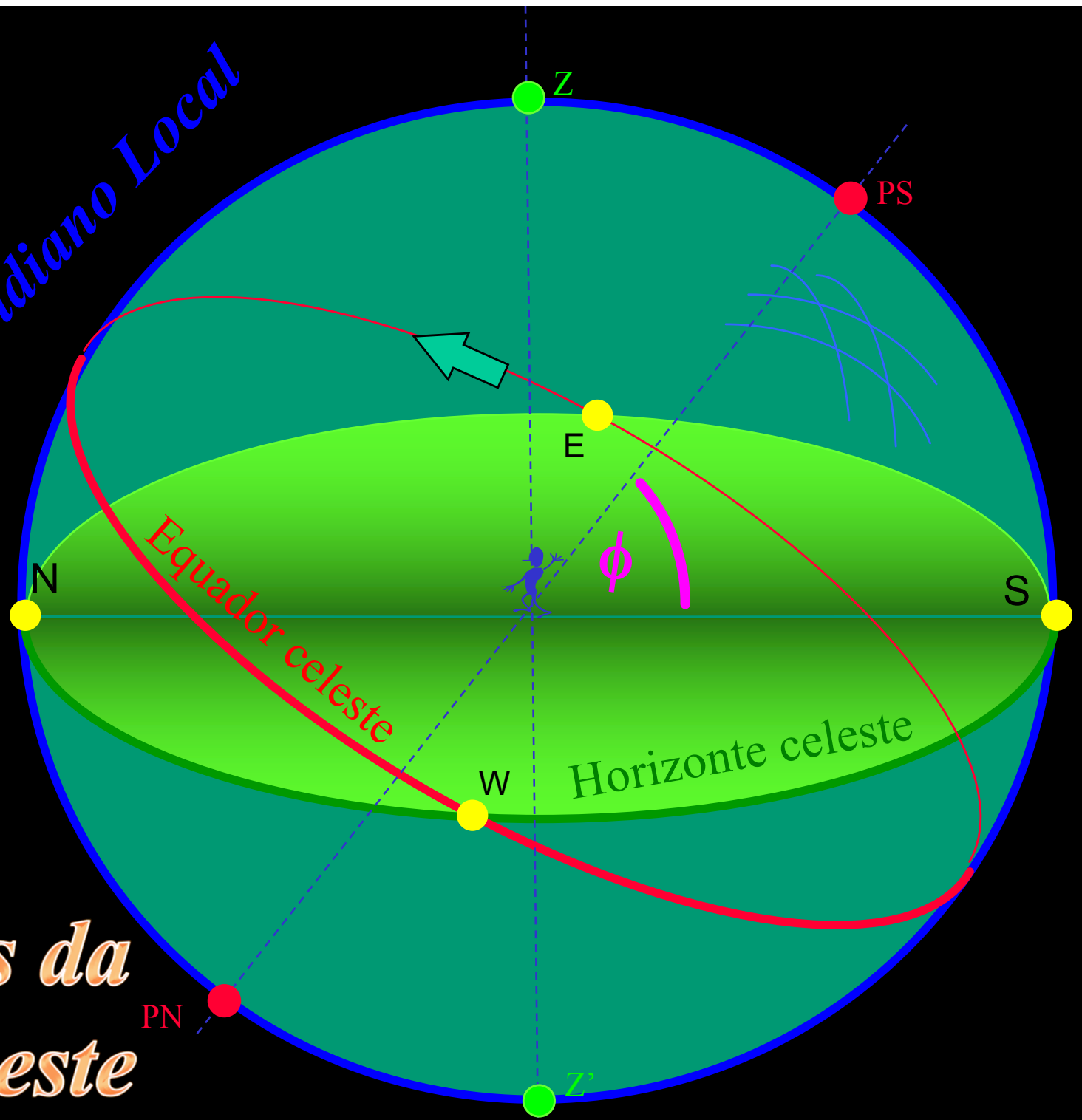
*elementos  
da  
esfera celeste*

# *latitude astronômica ou geográfica*





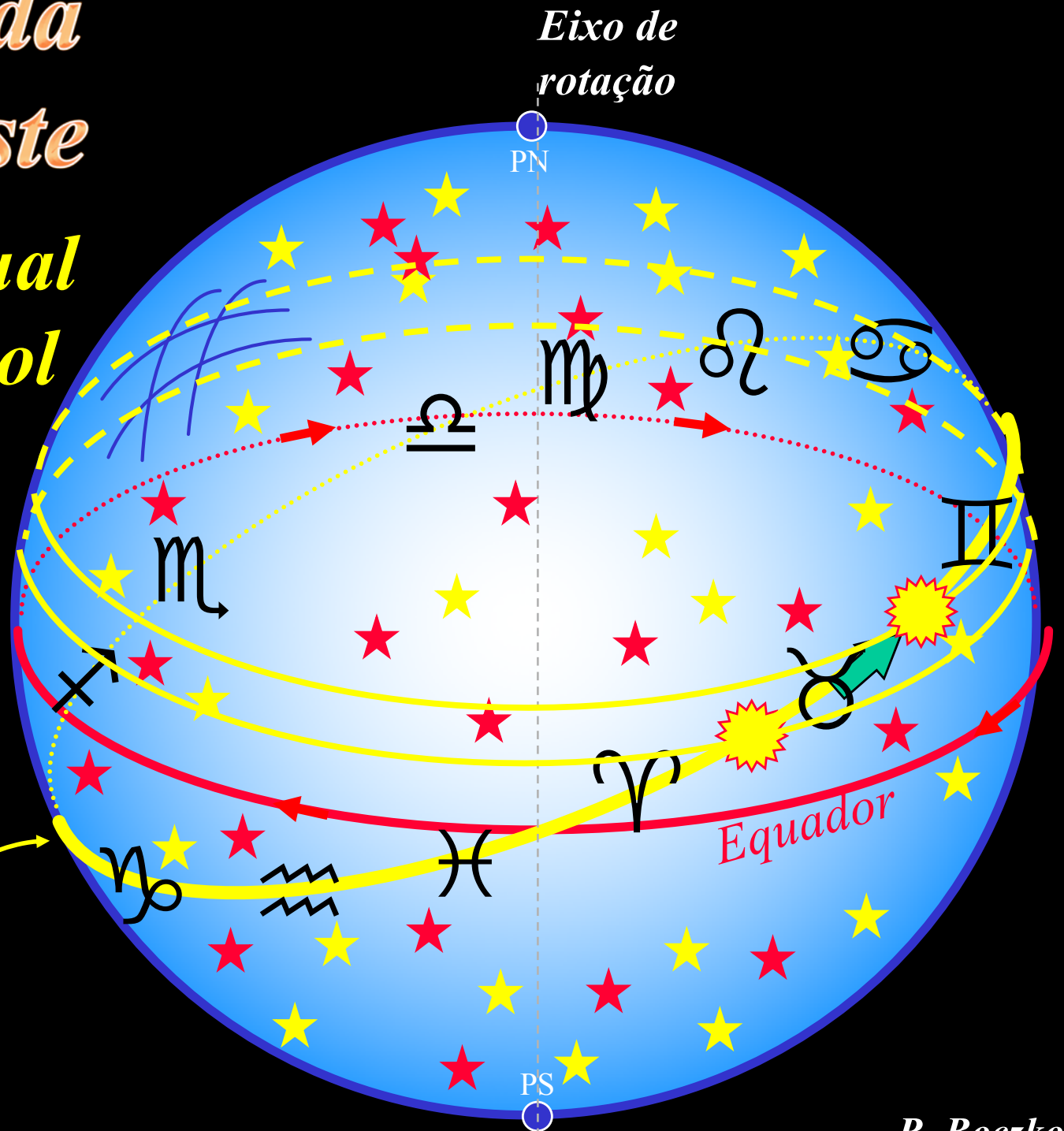
*Meridiano Local*



*elementos da  
esfera celeste*

# *elementos da esfera celeste*

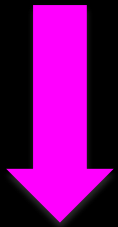
*movimento anual aparente do Sol*



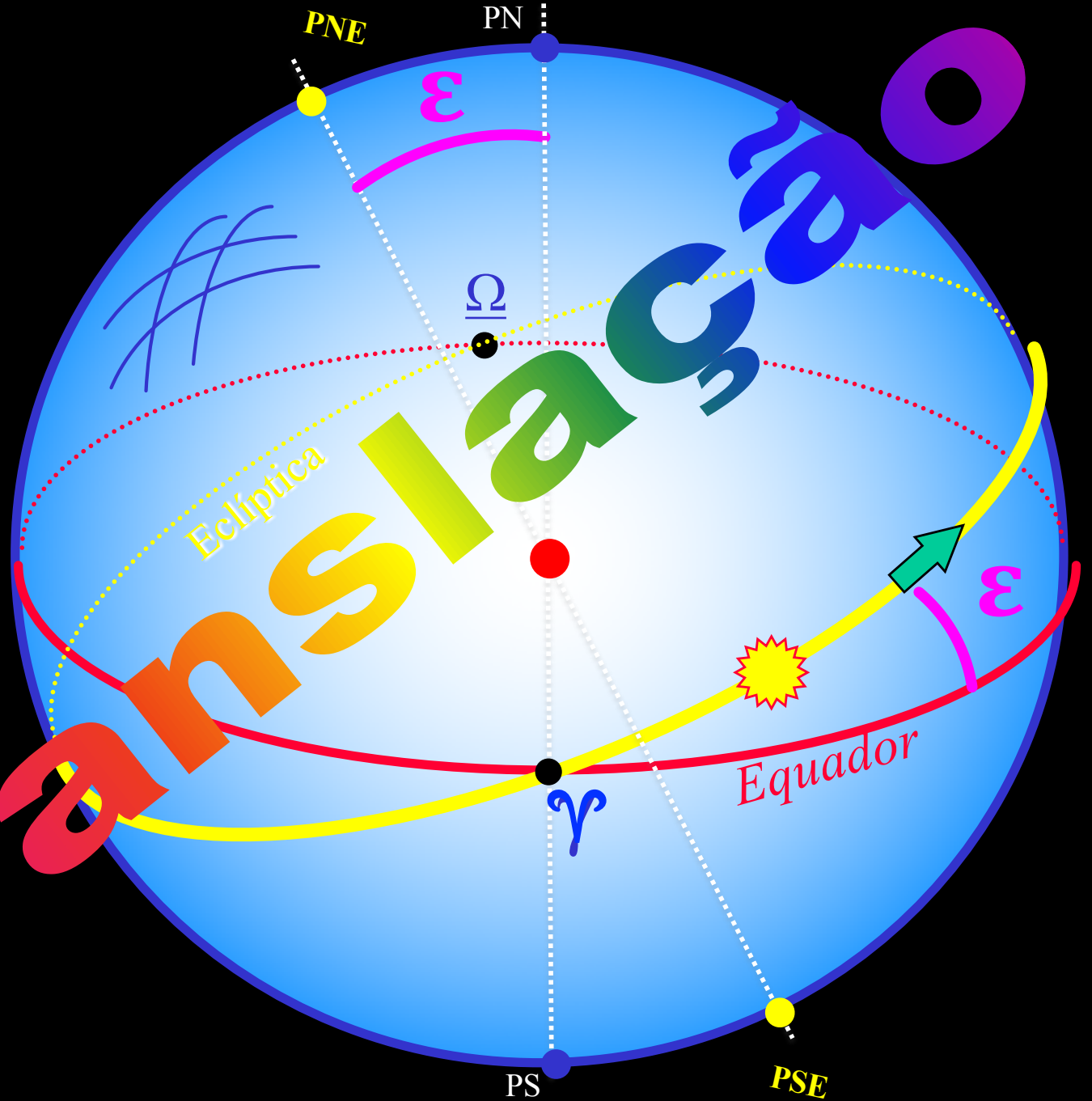
*eclíptica*

# elementos da esfera celeste

obliquidade  
da eclíptica



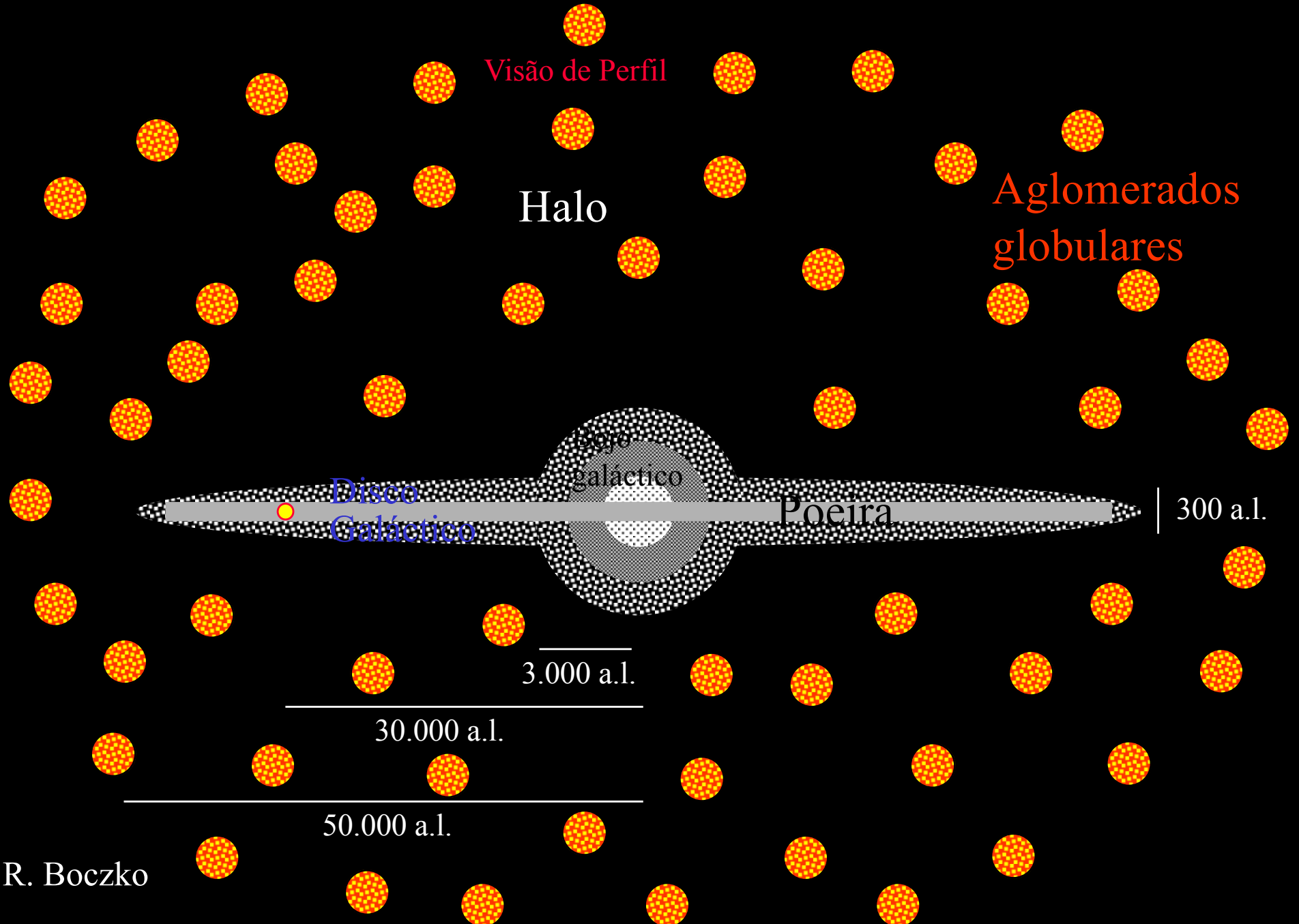
$$\varepsilon \sim 23^{\circ}27'$$



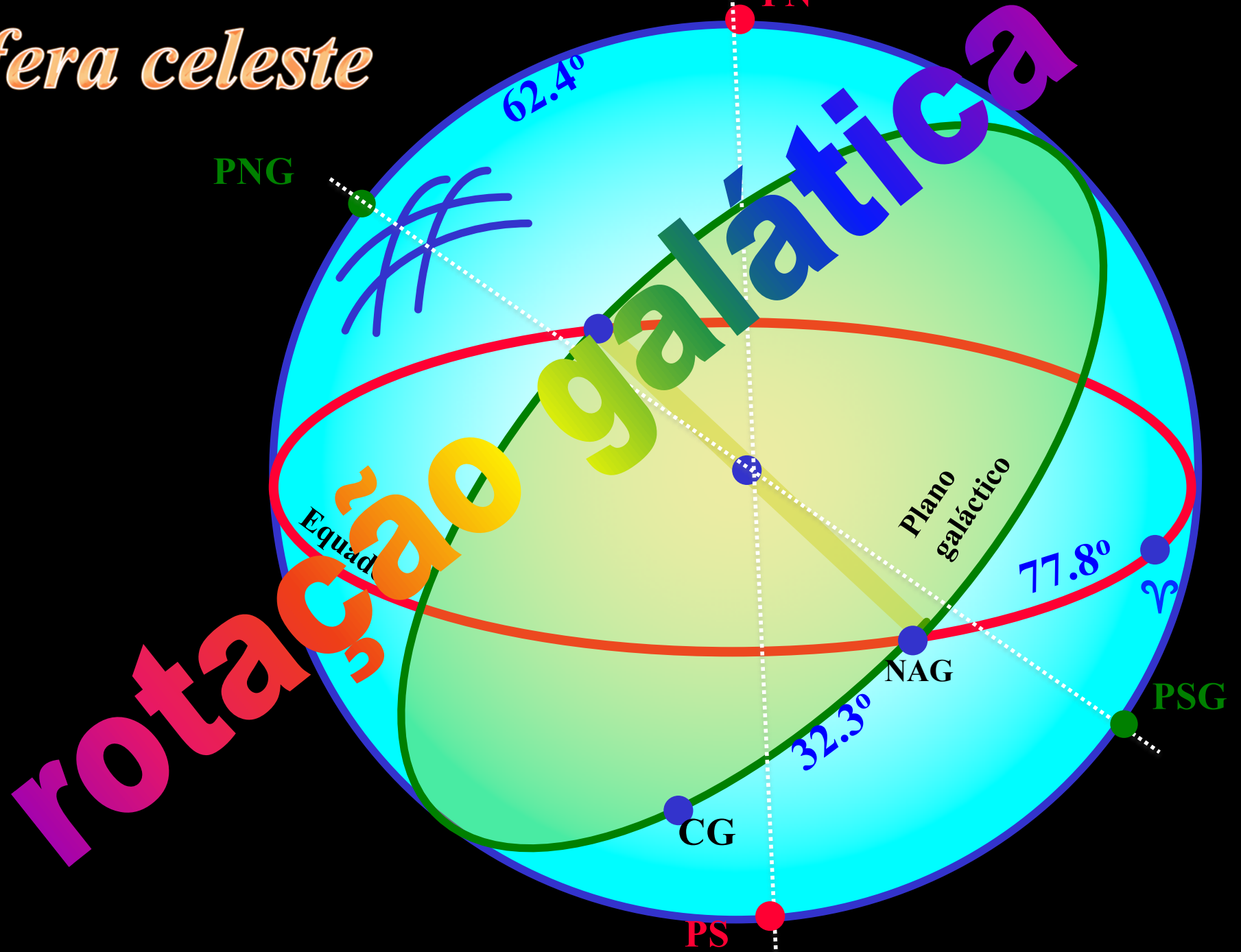
# *Via Láctea*



# Nossa Galáxia



*elementos da  
esfera celeste*



F I M