

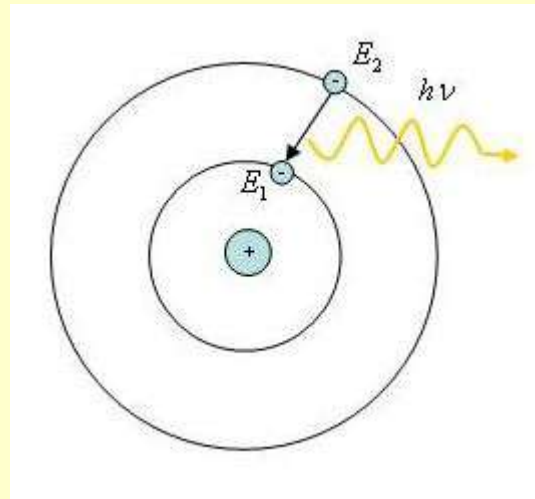
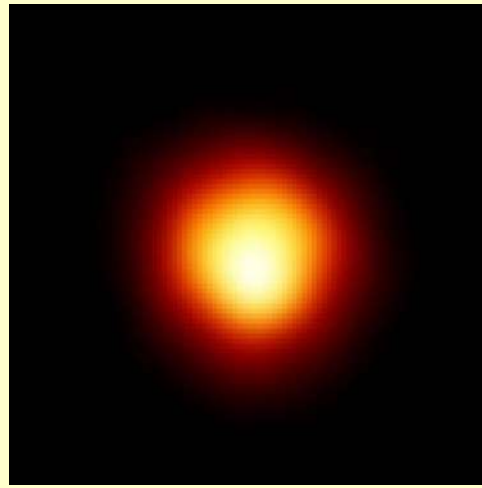
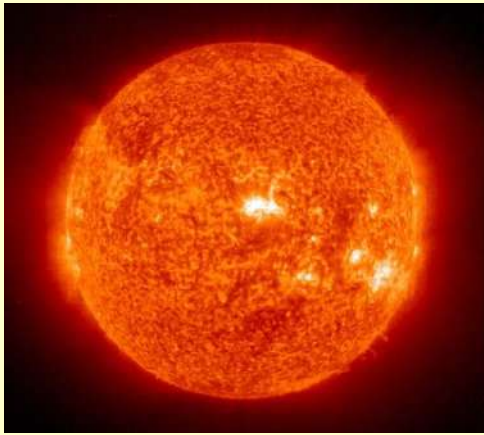
Kozmičke gama-zrake

Dario Hrupec
Institut Ruđer Bošković, Zagreb

Festival znanosti, Sinj
24. listopada 2012.

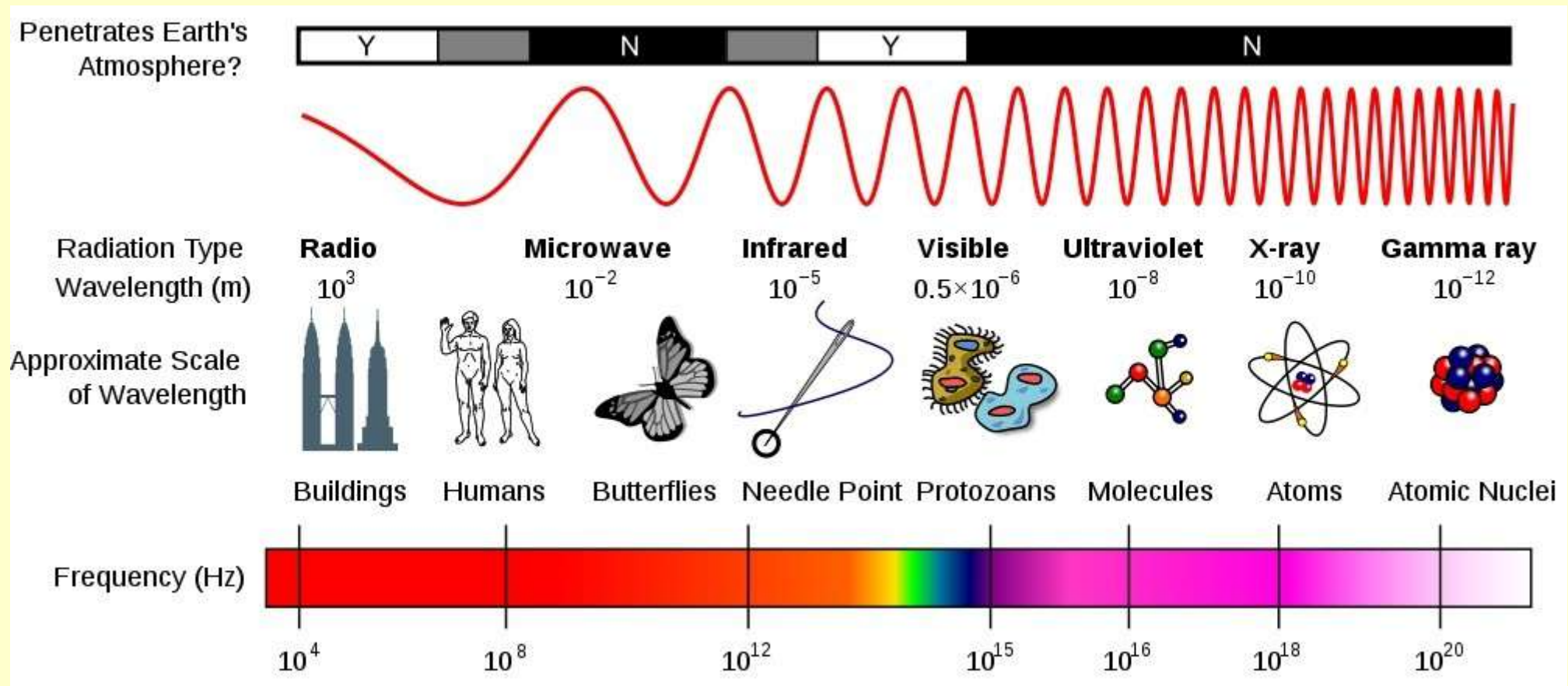
Što su kozmičke gama-zrake: vidljiva svjetlost

- nastanak: atomski prijelazi...



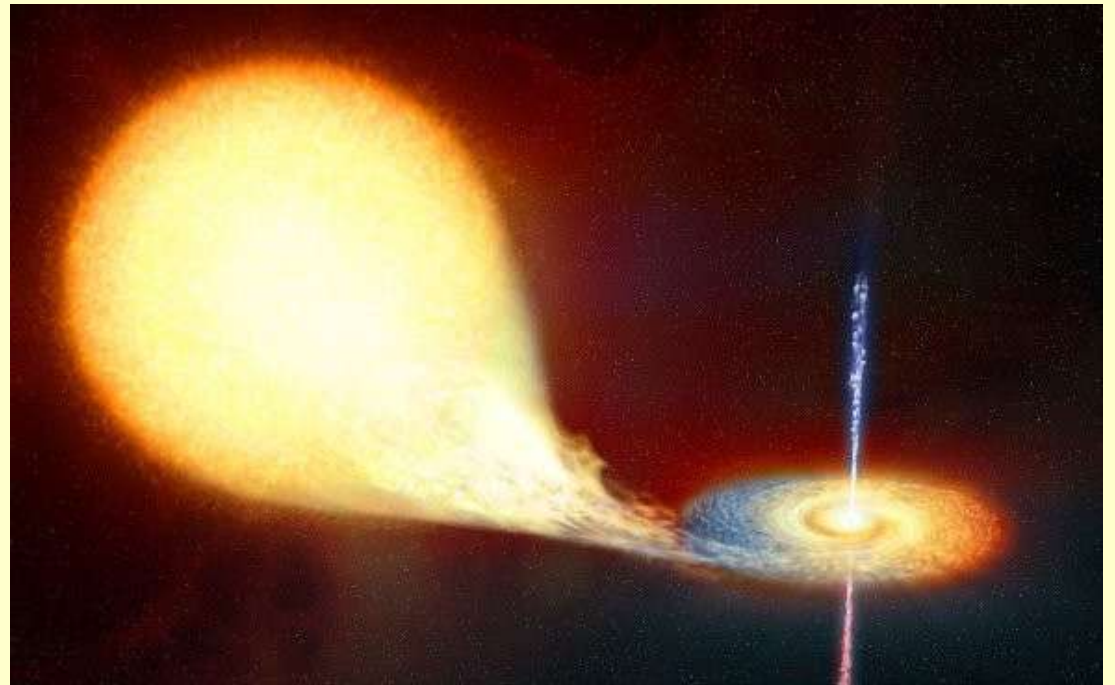
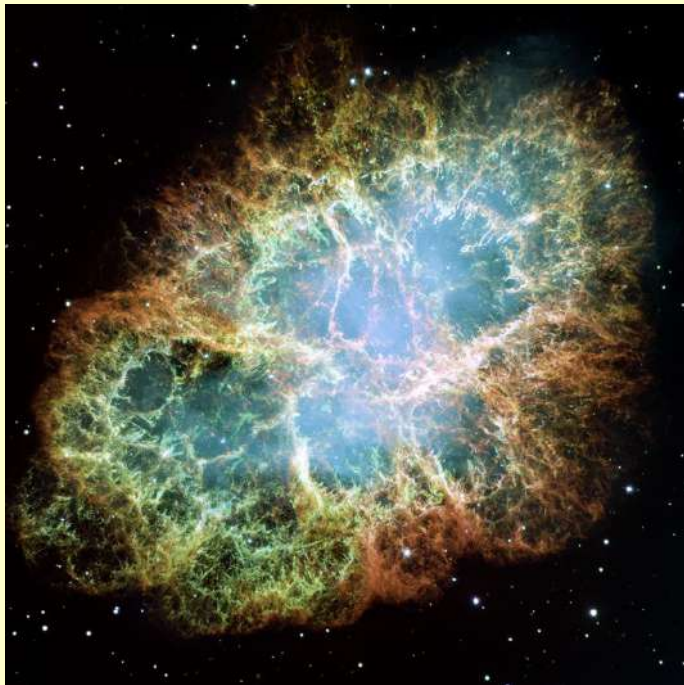
Što su kozmičke gama-zrake: druge “svjetlosti”

- elektromagnetski spektar
- druge “svjetlosti” nevidljive oku, ali opazive instrumentima



Izvori kozmičkih gama-zraka: galaktički

- ostaci supernova
- mikrokvazari



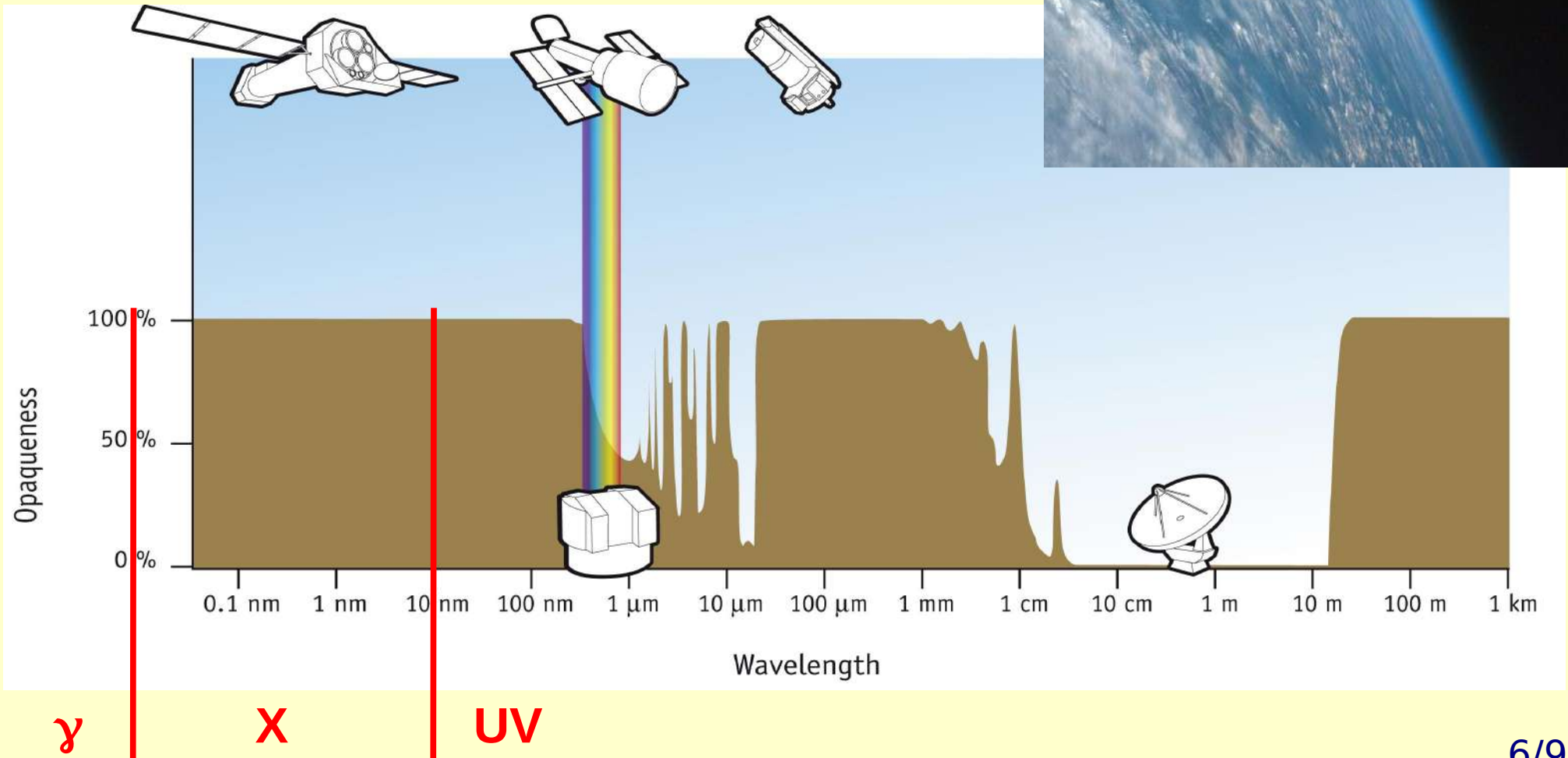
Izvori kozmičkih gama-zraka: izvangalaktički

- aktivne galaktičke jezgre (AGN)
- provale gama-zraka (GRB)

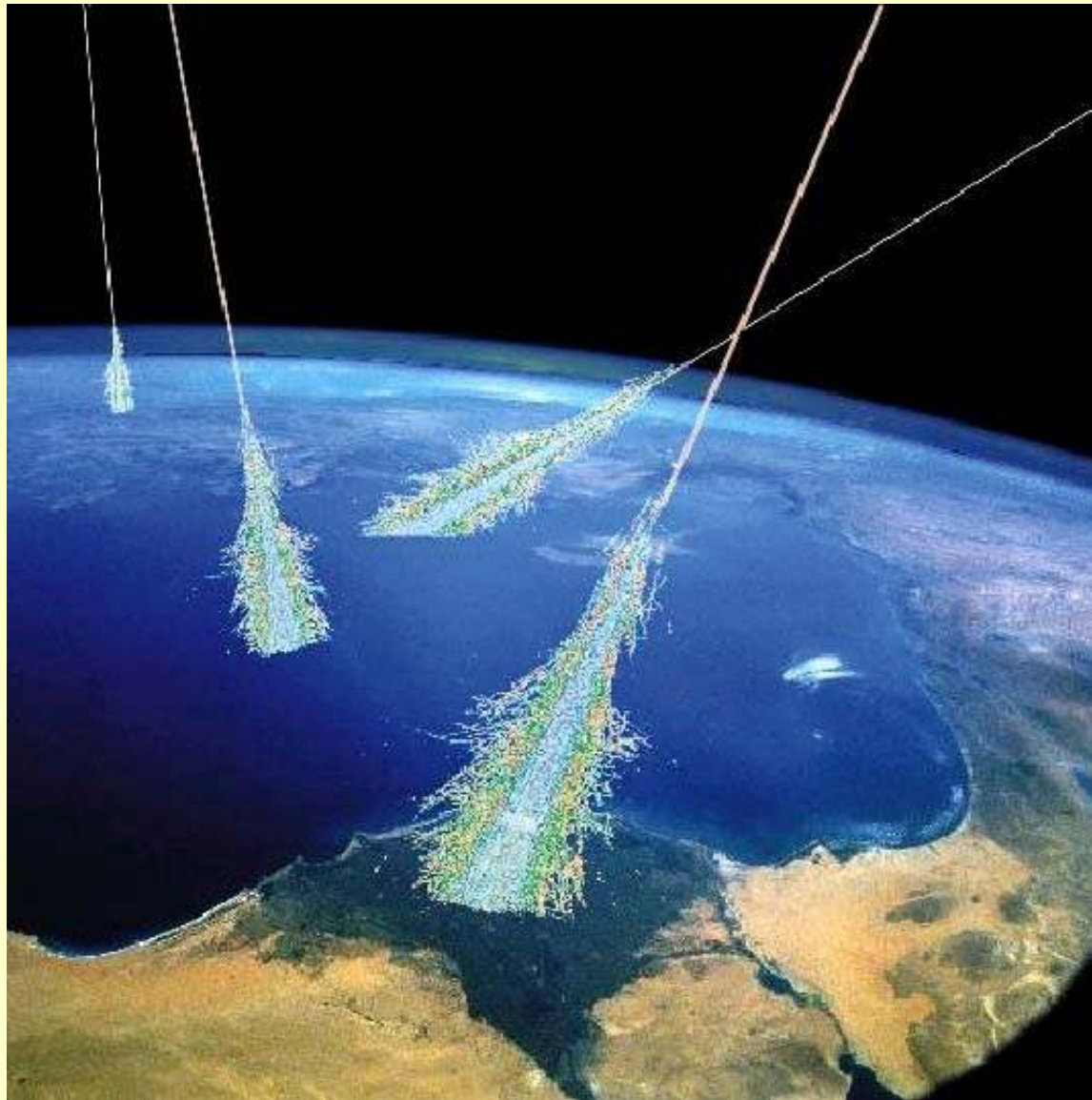


Opažanje kozmičkih gama-zraka: problem transparentnosti

- selektivna transparentnost atmosfere
- različiti detektori za različita područja



Opažanje kozmičkih gama-zraka: pljuskovni čestica u atmosferi



Opažanje kozmičkih gama-zraka: Čerenkovljevi teleskopi

- MAGIC, VERITAS, H.E.S.S.



Opažanje kozmičkih gama-zraka: teleskopi MAGIC

- Major Atmospheric Gamma-ray Imaging Cherenkov Telescope
- La Palma, Kanarski otoci
- promjer 17 m
- 40 t
- 10 M€

