Favourite (conventional !) Mechanisms

1. Hot Spots of RG lobes

[Biermann, Rachen, Kang, Farrar…]

No nearby visible sources?

↳ Intense intergalactic magnetic fields
Dormant radio-galaxies
GZK-violating interactions

2. Cosmological Gamma Ray Bursts

[Waxman, Vietri, Milgrom, Usov, Rees, Coppi…]

Rates not compatible with observed distributions of sources?
Energy budget?

↳ Galactic Cannonballs?

[Dar, Plaga, de Rujula…]

Time-energy correlations?
Heavy nuclei?

3. (Baby) Neutron Stars

[Olinto, Blasi, Epstein, Gouveia dal Pino, Venkatesan, Miller…]

Heavy nuclei?
Evidence of galactic disk origin?