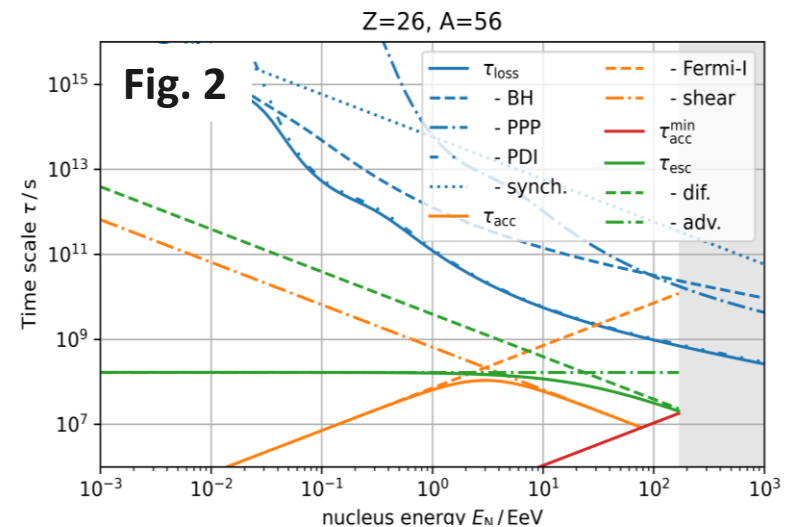
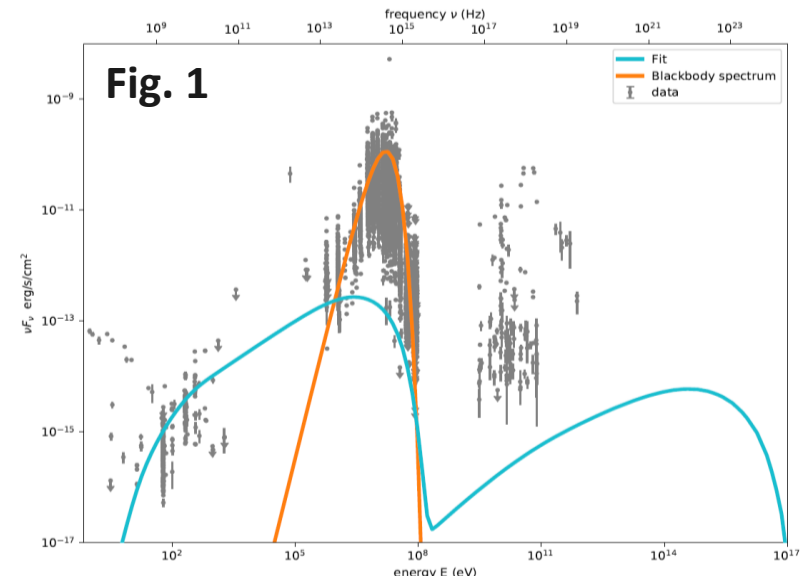


# UHECRs from FR-0 radio galaxies

FR-0s are **less luminous** but **more numerous** than known accelerators FR-1/2 galaxies → good candidate class for **isotropic UHECR flux contribution**

Can FR-0s accelerate up to the highest energies?

- Estimate **source environment** parameters: photon target field (Fig. 1), magn. field, size, Doppler factor
- Calculate **relevant time scales** (Fig. 2): **acceleration** (Fermi-1 and gradual shear), **escape** (diffusion and advection) **losses** (nuclei-photons)
- Derive **maximal energies**



$\langle \log(R/V) \rangle$	Fermi-1	Fermi-1+ grad. shear
Bohm Dif.	16.91±0.03	18.82±0.03
Kolmog. Dif.	14.08±0.02	18.82±0.03