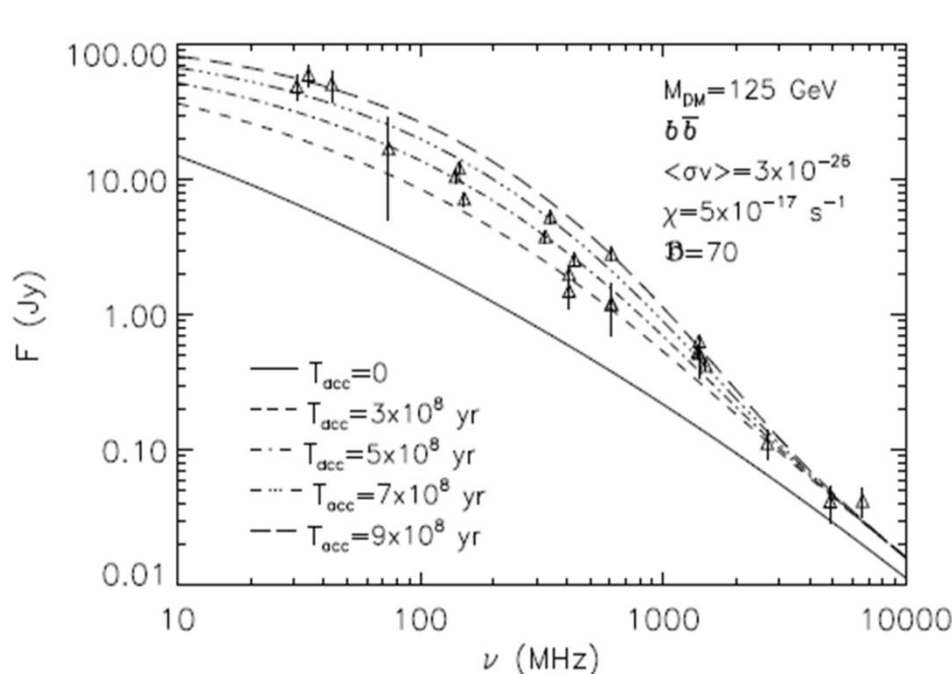


Constraints on dark matter annihilation from radio halos in galaxy clusters

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- Dark matter annihilation is a possible source of relativistic electrons in galaxy clusters
- These electrons can have a role in producing radio halos
- If this is true, from halo spectral shape the properties of DM might be recovered
- But electrons can be accelerated by turbulence-related processes



- Spectral shape is modified
- At high frequency the spectral shape of seed electrons is preserved
- Coma radio halo has been observed at 6.6 GHz with SRT
- Assuming it is due to DM, constraints on DM and acceleration properties can be derived