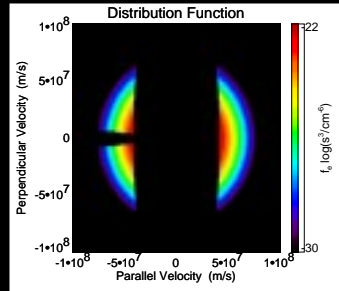
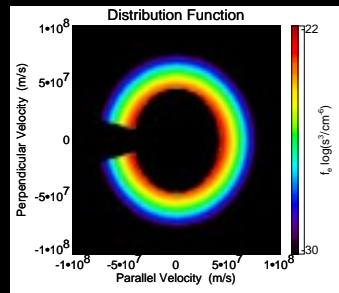


THE ELECTRON CYCLOTRON MASER

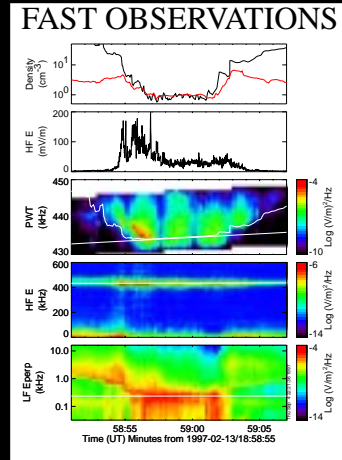
1. Energy source: Parallel electric fields accelerate auroral electrons earthward.



2. Inversion: The electrons evolve to an unstable “shell distribution” from the influence of the Earth’s magnetic field.



3. Emission: The unstable electrons emit powerful radio waves in a very small (~1 km in altitude) region.



4. Observations: The FAST satellite investigates the electron cyclotron maser inside of the source region.

