

Upgraded reflectometer array will investigate CAE role in enhanced electron transport

UCLA



- Enhanced thermal electron transport observed to **correlate with GAE activity**

- D. Stutman *et al* PRL **102**, 115002 (2009); K. Tritz Invited Talk APS DPP 2010

- Recent measurements with 16 channel reflectometer array show **CAEs must also be considered**

[Crocker *et al*, PPCF **53** 105001(2011)]

- frequencies similar to GAEs – can modify electron orbits like GAEs
- CAEs strongly core localized, where transport enhanced

- Upgrade will add **8 channels** to array
 $\sim 80 < f < \sim 100$ GHz

- Current Array: 16 channels, 30 – 75 GHz

- Increases accessible density to $n_0 > \sim 10^{14} \text{ m}^{-3}$

- Increases number of channels to 24

