Chapter 6 revisions in response to PAC-33 debriefing comments

"PAC would like to suggest that an even greater impact could be made ... by demonstrating AE control and *this goal did not come out very strongly in the energetic particle presentation*."

- AE control through "fast ion phase-space engineering" is one of the main goals of Thrust EP-2.
- 5yp text already reflects this (better than MP did in the PAC presentation).

"It would also be valuable to develop a predictive capability for the stability of AE's and then *include this capability into the control system* [...] *in real-time* for event handling."

- Reduced code for RT predictions of *AE stability unlikely even in ~10 years
- Propose alternative approach: detect marginally stable/unstable *AEs, then use NB, MP/NCC coils, rf, antenna to act on fast ion distribution -> alter mode stability.
  - > RT mode detection of *AEs already demonstrated (JET), control part is new.
- Text updated (e.g. Sections 6.2.2, 6.3.3.2, 6.3.4) to include possible *upgrade of *AE detection system for real-time mode detection*.
  - > Pending incremental funding and success of *AE antenna
  - > Required funding is ~$20k - not including PCS-specific tasks.

Comment from PAC debriefing in blue
Revision to chapter 6 in response to comment in red