# It is important that NSTX take an active role in the discussions of research topics identified by the FESAC Priorities Panel

- Rich will be leading a discussion this afternoon at 3:30
- The community is being asked to describe our research along scientific topical lines, rather than by devices
- NSTX can do well in this regard, since we have spent considerable effort in describing the scientific value of high beta and low A and comparisons to tokamaks & other devices

## We have been working with C-Mod and DIII-D in assessing and developing recommendations regarding collaboration and cooperation

- A request from Ray Orbach, through Anne Davies
- The interest from DoE in how we work together, and whether or not there is needless duplication, is very high. The best thing we can do is to make sure that we make the case for the strong complementarity of our work.
- A couple of simple recommendations will come from this, including
  - Encourage group leaders as well as all researchers to attend each others' Forums
  - Have a fairly high level talk from each program given at each others' sites prior to their forums to inform the teams about research directions & plans

#### A new link will be added to the NSTX page

- From the NSTX home page, you will be able to go to a "Publications" area
- In this area, you will be able to create a folder with your name, into which you will deposit your published papers
- Thanks to Rajesh for this suggestion
- This is not a substitute for submitting draft papers for posting and for review.

### An augmented approach for EBW development is underway

- Realization: DIII-D can run overdense plasmas and study EBW with their 110 GHz tubes. Second harmonic, downshifted using PPPL launchers. Same physics as a 28 GHz, NSTX system would employ.
- Launchers provide launch angle & polarization control. They
  have lots of power, and a mature MSE system as well.
- Modeling is underway to see if a sensible round of experiments can be done on DIII-D to see EBW current drive and heating and compare to theory, and to study coupling physics
- Thanks to Phil E. for pointing out this opportunity. If the experiments look reasonable, this will be a strong addition to our EBW development effort. GaryTaylor is pursuing this with Phil, Tim Luce, and Bob Harvey

### We need to work together regarding control development

- There has been lots of hard work regarding rtEFIT
  - A development effort that will have high payoff
- But the development requirements have caught some by surprise.
- The run scheduling exercise reveals that we are now in a position where we have to exercise more discipline in our control system development and run planning, and we have to communicate the needs and status of both control and experiments more effectively and in a more timely manner.

#### Continued...

- It is in the interest of session leaders to develop an understanding of control system capabilities and limits before entering the control room.
- It is also in everyone's interests if operators know the goals and strategy of a particular day's experiments
- So, to these ends,
  - XP reviews: we need to pay closer attention to control requirements during the XP review. In many cases, this will be trivial, but it will also help avoid surprises.
  - Session leaders: work with a physics operator to help with the development of an experimental proposal, prior to approval.
     Discuss what you want to do and reach a common understanding regarding control development time for your XP.
  - I will work with physics ops to make sure the status, plans, and needs of the control system development are communicated effectively to the team