

The ITPA Pedestal and Edge group has met twice during the year under the chairmanship of Howard Wilson (University of York, UK) and strong guidance from the co Chairs Naoyuki Oyama (JAEA, Japan) and Alberto Loarte (ITER Organisation). The first meeting was hosted by MIT (US) during 30 March 1 April, and the second at the York Plasma Institute at the University of York (UK) 5 7 October. Each meeting had around 40 participants from EU, US, China, Japan and S Korea. A particularly exciting development, which offers great promise for the further development of pedestal physics, was the results from the Asian tokamaks that have recently achieved H mode: KSTAR, EAST and HL 2A. Combined with a vast range of results from those tokamaks which already have a well established H mode physics basis, as well as advances in theory and modelling, it has been a good year for pedestal physics with substantial progress on a number of important issues for ITER, and fusion in general. This report gives the headlines of the progress and provides a list of publications related to the research for the period June 2008 December 2011. It is not possible to do full justice to the work of the group in such a short note. For further details in

- It has been an exciting, if somewhat puzzling, year for ELM control by resonant magnetic perturbations, with new data from AUG and KSTAR.
- AUG have operated with two (above/below midplane) rows of four coils at high collisionality (cf DIII D). A threshold density is required for ELM mitigation; there is no sign of density pump out and no evidence for a resonance window in  $q_{95}$ . DIII D experiments at low collisionality do see a density pump out and  $q_{95}$  resonant windows for observing the effect, so there is ongoing work to understand these differences.
- KSTAR have employed an  $n=1$  RMP and observed complete ELM suppression, with an associated density pump out (although the density begins to recover during the ELM suppression phase).

- DIII D (have)Tj/C221Tf0Tc1.9 add(ipremlances.)



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