

Annual report of the ITPA Topical Group on Energetic Particle Physics

For the period Nov 2011 to Oct 2012

The EP Topical Group held two meetings (8th and 9th) during the reporting period – at National Institute for Fusion Science in Japan on March 7-9, 2012 and at the San Diego Marriott La Jolla Hotel in La Jolla, USA on October 15-17, 2012, immediately after the IAEA Fusion Energy Conference which was held on October 8-13.

Minutes of these meetings and viewgraphs presented are available at the ITPA website, therefore only a summary of the main results is given here.

In addition to JEX activities, the work of the group was concentrated mainly on the following topics:

- x Benchmark effort for the linear codes of Alfvén eigenmode
- x Benchmark effort for the non-linear codes of Alfvén eigenmode
- x Evaluation of fast ion losses induced by

(two $q=2$ surfaces or $q>2$ throughout the whole plasma) not surprisingly different results concerning stability and most unstable modes were reported so far (LIGKA, MEGA). Plans for further work: Considering the first results for ITER, the details of the benchmark and the level of realism have to be rediscussed. At this point, the input of the ITER team in

Energetic particle diagnostics for ITER
It is considered that one of the important

