

## **Remarks by DDG-NA on occasion of the Award of the Nuclear Fusion Prize 2007 and Nuclear Fusion Prize 2008**

Chairman, Distinguished Guests, Ladies and Gentlemen

It is a great honor and pleasure to present the Nuclear Fusion Prizes 2007 and 2008 to the distinguished laureates. The prize was launched to recognize exceptional research work in Nuclear Fusion and is awarded annually and presented at the IAEA's Fusion Energy Conference.

Both laureates have in common that their work, published in the Nuclear Fusion Journal in 2004 and 2005, have stimulated ITER physics and design, and encourage possible important improvements. They are an exceptional example of how theory, modeling and experiment go together in an international scientific environment.

As is usual, in 2007 the published work of ten nominees made it to the shortlist (in alphabetical order): C. Angioni, R. Kodama, B. LaBombard, P.T. Lang, N. Oyama, C.C. Petty, J.E. Rice, P.B. Snyder, H.R. Wilson, and S.J. Zweben

The award 2007 recognizes the work of Clemente Angioni, who predicts in his work, based on theory, modeling and experimental observation that density profiles in ITER will be more peaked under certain conditions. His paper is entitled Density response to central electron heating: theoretical investigations and experimental observations in ASDEX Upgrade. Much work related to Electron Cyclotron heating has been stimulated based on the results of the work of Angioni and his co-authors.

The shortlist of 2008 includes: T.E. Evans, Y. Hamada, E.M. Hollmann, E. Joffrin, B. LaBombard, N. Oyama, L. Rudakov, Y. Sakamoto, M.R. Wade, and K.Y. Watanabe.

I would like to present the Nuclear Fusion prize 2008 to Todd Evans. Entitled Suppression of large edge localized modes with edge resonant magnetic fields in high confinement, this outstanding paper shows that edge localized modes (ELM) suppression is possible without H-mode confinement reduction. A set of resonant magnetic field perturbation coils makes it possible to suppress large amplitude ELMs. Such coils are subject of much discussion for the ITER team and teams of many international devices.

The Nuclear Fusion Prize consists of a certificate, an award and a cheque for 2500 US \$, which has been contributed by the Institute of Physics Publishing. I would like to ask the chair of the board of editors, Prof. Kikuchi to join me in making these awards. The Nuclear Fusion journal and their board of editors have once again done an excellent job in promoting the Nuclear Fusion prize. I would like to take this occasion to thank Prof Kikuchi and the board for their work in supporting the fusion community.

I would like to ask the two laureates to come to the rostrum to receive their prize. First Prof. Angioni will receive the prize, followed by Prof. Evans.

Finally, I would like to thank all the fusion specialists in the plenary, who contributed to the work of the laureates. I do encourage all of you to make use of the results for your work, and to make use of the Nuclear Fusion Journal to publish your best results.