

# Plasma Physics and Controlled Fusion

Volume 57 Number 6 June 2015

**13TH INTERNATIONAL WORKSHOP ON THE FAST IGNITION OF FUSION TARGETS (OXFORD, UK, 14–18 SEPTEMBER 2014)**

## PREFACE

- 060301** **Preface: 13th International Fast Ignition Workshop**  
A P L Robinson

## SPECIAL SECTION PAPERS

- 064001** **Influence of low-temperature resistivity on fast electron transport in solids: scaling to fast ignition electron beam parameters**  
P McKenna, D A MacLellan, N M H Butler, R J Dance, R J Gray, A P L Robinson, D Neely and M P Desjarlais
- 064002** **Comprehensive description of the Orion laser facility**  
Nicholas Hopps, Kevin Oades, Jim Andrew, Colin Brown, Graham Cooper, Colin Danson, Simon Daykin, Stuart Duffield, Ray Edwards, David Egan, Stephen Elsmere, Steve Gales, Mark Girling, Edward Gumbrell, Ewan Harvey, David Hillier, David Hoarty, Colin Horsfield, Steven James, Alex Leatherland, Stephen Masoero, Anthony Meadowcroft, Michael Norman, Stefan Parker, Stephen Rothman, Michael Rubery, Paul Treadwell, David Winter and Thomas Bett
- 064003** **Physical studies of fast ignition in China**  
X T He, Hong-bo Cai, Si-zhong Wu, Li-hua Cao, Hua Zhang, Ming-qing He, Mo Chen, Jun-feng Wu, Cang-tao Zhou, Wei-Min Zhou, Lian-qiang Shan, Wei-wu Wang, Feng Zhang, Bi Bi, Zong-qing Zhao, Yu-qiu Gu, Bao-han Zhang, Wei Wang, Zhi-heng Fang, An-le Lei, Chen Wang, Wen-bing Pei and Si-zu Fu
- 064004** **Guiding of laser-generated fast electrons by exploiting the resistivity-gradients around a conical guide element**  
A P L Robinson, H Schmitz, J S Green, C P Ridgers and N Booth
- 064005** **Efficient propagation of ultra-intense laser beam in dense plasma**  
H Habara, S Ivancic, K Anderson, D Haberberger, T Iwawaki, C Stoeckl, K A Tanaka, Y Uematsu and W Theobald

## TECHNICAL NOTE

- 062001** **Plasma rotation and ion temperature measurements by collective Thomson scattering at ASDEX Upgrade**  
M Stejner, S K Nielsen, A S Jacobsen, S B Korsholm, F Leipold, R M McDermott, P K Michelsen, J Rasmussen, M Salewski, M Schubert, J Stober, D H Wagner and the ASDEX Upgrade Team

## REGULAR PAPERS

- 065001** **The role of thermal conduction in tearing mode theory**  
J W Connor, C J Ham, R J Hastie and Y Q Liu
- 065002** **Comparative analysis of core heat transport of JET high density H-mode plasmas in carbon wall and ITER-like wall**  
Hyun-Tae Kim, M Romanelli, I Voitsekhovitch, T Koskela, J Conboy, C Giroud, G Maddison, E Joffrin and JET contributors
- 065003** **Direct observation of transition to electron Bernstein waves from electromagnetic mode by three mode-conversion scenarios in the dipole confinement torus plasma**  
K Uchijima, T Takemoto, J Morikawa and Y Ogawa
- 065004** **Using a local gyrokinetic code to study global ion temperature gradient modes in tokamaks**  
P A Abdoul, D Dickinson, C M Roach and H R Wilson

*(Continued on inside back cover)*