

The ADAS Workshop

4-5th December 2017, Abingdon, UK

Monday 4th December

Session 1: Overview of spectroscopy for fusion and astrophysics

- 09:00 – 09:25 Manfred Von Hellermann *TBC*
- 09:25 – 09:50 Mark Nornberg *TBC*
- 09:50 – 10:15 Stanislav Serov *TBC*
- 10:15 – 10:30 Alessandra Giunta *Atomic data for Solar Orbiter/SPICE: solar spectrum and ground calibration*
- 10:30 – 10:45 Anna Cremona *Optical Emission Spectroscopy activities at IFP-CNR*

Coffee Break

Session 2: Emission diagnostics

- 11:15 – 11:30 Damien Weidmann *TBC*
- 11:30 – 11:45 Sean Knott *Ion temperature measurements in a helium plasma from Doppler Broadening of the He II 468 nm lines*
- 11:45 – 12:00 Lisa Reusch *Integrated Data Analysis using Quantitative X-ray Brightness Measurements*

Lunch

Session 3: Accuracy of atomic physics codes

- 14:00 – 14:15 Matthew Bluteau *TBC*
- 14:15 – 14:30 Stuart Henderson *An algorithmic technique for atomic structure optimization using the Autostructure code*
- 14:30 – 14:45 Jacek Rzadkiewicz *Two-electron one-photon transition characteristics for low-Z K-shell hollow atoms*
- 14:45 – 15:00 Simon Preval *The Tungsten project – A complete and comprehensive set of DR/RR rate coefficients for use in modelling magnetically confined finite density plasmas*
- 15:00 – 15:15 Martin O'Mullane *TBC*

Coffee break

Session 4: Influx of heavy species

- 15:45 – 16:00 Alina Eksaeva *Validation of the new MS-resolved ADAS dataset for Cr-Mo-W sequence by ERO simulations of spectroscopy at PSI-2 facility*
- 16:00 – 16:15 Curt Johnson *Investigation of Neutral Tungsten Spectroscopy for Improved Erosion Measurements*
- 16:15 – 16:30 Sebastijan Brezinsek *Update on W source spectroscopy*
- 16:30 – 16:45 Arvydas Sepetys *TBC*
- 16:45 – 17:00 Ralph Dux *Forbidden lines of W in AUG*

Tuesday 5th December

Session 5: Overview of spectroscopy for JET and MAST-U

- 09:00 – 09:25 Dmitriy Borodin *The role of ADAS in the JET research programme*
- 09:25 – 09:50 James Harrison *Overview of atomic data needs for MAST-U*

Session 6: Atomic data for astrophysical diagnostics

- 09:50 – 10:05 Martin Laming *Polarized H-alpha Emission from Supernova Remnant Shock Waves Efficiently Accelerating Cosmic Rays*
- 10:05 – 10:20 Alexandra Rigby *Electron Acceleration in a Magnetized plasma*

Coffee break

- 11:00 – 11:15 Philip Judge *Atomic physics and solar polarimetry*
- 11:15 – 11:30 Jagjit Kaur *TBC*
- 11:30 – 11:45 Giulio Del-Zanna *TBC*
- 11:45 – 12:00 Stuart Loch *Plans for uncertainty estimates on fundamental atomic data for astrophysical diagnostics*

Lunch

Session 7: Low temperature and edge plasma

- 13:30 – 14:00 Kurt Behringer *Molecular Bands from Technical Plasmas*
- 14:00 – 14:15 Sebastijan Brezinsek *D2 molecular emission in JET: differences in C and W*
- 14:15 – 14:30 Daniel Darby *Population modelling and spectra analysis for BeH/D/T on JET, using R-Matrix data*

Coffee break

- 15:00 – 15:15 Paco Tabares *TBC*
- 15:15 – 15:30 Kevin Verhaegh *TBC*
- 15:30 – 15:45 Daljeet Gahle *Bayesian Spectroscopic Analysis of N II Line Emission for the Characterisation of Volumetric Plasma Parameters in Diverted TCV L-mode Plasmas*
- 15:45 – 16:00 Matthew Reinke *UV Divertor Impurity Spectroscopy in JET Radiative Exhaust Experiments*
- 15:45 – 16:00 Bart Lomanowski *Spectroscopic investigation of Ly series opacity on JET-ILW using population escape factor approach*

Session 8: Overview

- 16:00 – 16:15 Christian Hill *Recent activities in Atomic and Molecular Data at the IAEA*
- 16:15 – 16:30 Martin O'Mullane *ADAS Matters*