

THE 14TH ADAS WORKSHOP
4-7 October 2009
Ringberg Castle

AGENDA

Adjustments may be made to the agenda at the commencement of the meeting

Sun. 4 Oct.

19.30 Evening meal

Mon 5. Oct.

08.50-09.00 Adjustments and ratification of the agenda

1st session: Updates from across the world
09.00-10.30 Chairman: K-D Zastrow

Y. Zou (20min)	SuperEBIT studies at Fudan University, China
Z. Rudzikas (20min)	Complex many-electron highly charged ions studies at ITPA, Vilnius, Lithuania
R. Bingham (20min)	Space plasmas and x-ray emission, RAL, UK
N. Brooks (15min)	Charge exchange spectroscopy in the EUV using digital lock-in techniques
K. Ikeda (15 min)	Beam emission measurements of hydrogen discharge with carbon pellet injection in LHD

Discussion:

10.30 Coffee

2nd session: Lifting the fundamental atomic database I (ions and molecules)
11.00-12.15 Chairman: K. H. Behringer

L. Errea (15 mins)	Methods and calculations of single electron capture and nuclear exchange in $H^+ + H_2$ collisions from high to low energies
K. Igenbergs (15min)	Atomic orbital close-coupling calculations of CXRS relevant cross-sections
L. Mendez (15 min)	Low energy charge exchange of hydrogen with partially stripped ions
I. Schneider (15min)	Dissociative recombination and competitive processes: application to NO^+ , CO^+ and H_2^+ and isotopes
F. Guzman (15min)	Charge exchange cross-sections for H with B^{+5} and other fully stripped ions and applications

Discussion:

12.30 Lunch

3rd session: Atomic physics and fusion plasma models
13.45-14.35 Chairman: J. Stober

D. Reiter (15min)	Atomic data and computational models of fusion plasma
M. Kraus (15min)	Interfacing ADAS data to NUBEAM and TRANSP
D. Tskhakaya (10min)	Need for atomic and molecular data for kinetic modelling of the plasma edge

D. Borodin (10min)

Simulation of Be light emission at PISCES B:
tracking of metastable states

Discussion:

4th session:
14.45-15.30

Atomic physics and astrophysical studies
Chairman: R. Bingham

R. Smith (15min)
G. Doyle (15min)
A. Giunta (15min)

High-resolution X-ray calorimetric detection
Spectral signatures of dynamical plasmas
Generalised CR modelling, contribution
functions and solar spectra

Discussion:

15.30 Coffee

5th session:
16.00-17.10

Reports from the Laboratories
Chairman: A. Pospieszczyk

A. Kukushkin (15min)
A. Kendl(15min)
D. Kilbane (10min)
M. Song (10min)
B. den Hartog (10min)
J. Wyart (10min)

ITER update on atomic data and model
requirements
Electron-molecule and ion-surface experiments
at the University of Innsbruck
Development of EUV lithographic sources at UCD
A review of the atomic and molecular research at
the National Fusion Research Institute, Korea
CHERS and MSE at Madison, Wisconsin
Atomic data for plasma modelling at Aimé
Cotton Laboratory

Discussion:

17.15-18.15

ADAS Steering Committee Meeting

18.30 Evening meal

Tue. 6 Oct.

1st session:
8.55-10.30

Lifting the fundamental atomic database II (electron data)
Chairman: Y Zou

A. Mueller (15min)
E. Biémont (15min)
C. Biedermann (15 min)
N. Badnell (15 min)
C. Ramsbottom (15min)
V. Stancalie (10 min)
R. Kisielius (10 min)

Reference ionization and recombination cross-
section measurements
Atomic structure investigations of heavy atoms
and ions
Spectroscopy of highly charge ions with EBIT
Electron impact cross-section calculation update
Cross-section calculations with R-matrix II
Progress report on atomic data calculations at
INFLPR, Romania
Modified relativistic approach for atomic data
calculation

Discussion

10.30 Coffee

2nd session: Atomic physics and fusion plasma diagnostics
11.00-12.15 Chairman: M von Hellermann

D. Dodt (15 mins)	Status of lithium beam analysis at JET and AUG
A. Pospieszczyk (15 mins)	Determination of Tungsten Fluxes from W I- and W II-lines
D. Wunderlich/U. Fantz (15 mins)	Progress of CR modelling for molecules relevant to fusion
N. Conway (15 mins)	CXRS and MSE update from MAST
M. Reinke (15min)	Spectroscopy, transport and radiation modelling at Alcator C-mod

Discussion:

12.30 Lunch

3rd session In the ADAS and ADAS-EU pipelines
14.00 – 15.15 Chairman: N. Badnell

H. Summers (15 min)	Some scientific issues in ADAS developments
C. Ballance (15 min)	Relativistic electron impact cross-section calculations
A. Foster (15min)	Completing the heavy species modelling - ionisation
C. Nicholas (15 min)	Integrated spectral analysis and fitting
F. Guzman (15min)	Molecular data and ADAS

Discussion:

15.30 Coffee

4th session: ADAS summary and status report
16.00-17.00 Chairman: R. Guirlet

A. Whiteford (20 min)	ADAS operation, visits, current release, corrections & recommendations
M. G. O'Mullane (20 min)	Critical review of ADAS
Summers/O'Mullane/Whiteford (20 min)	General discussion*, summary and closing

**General Discussion to include:* grumbles, complaints & wish lists reasonable & unreasonable, forward plans for 2010, joint work, publications- fielded by Martin O'Mullane, Allan Whiteford and Hugh Summers.

17.15-18.15 ADAS-EU Governance Committee Meeting

18.30 Evening meal

Wed. 7 Oct. (am) Departure

Hugh Summers / Thomas Puetterich
30 Sep 2009