

# 2008 ADAS Workshop — Jülich

September 30, 2008

## Session 1 : Reports from the ADAS consortium

Chaired by: K-D Zastrow

08:50 – 09:00	Welcome and agenda ratification	M O'Mullane	ADAS
09:00 – 09:15	Beam attenuation studies in high temperature plasma at LHD	K Ikeda	NIFS
09:15 – 09:30	Superstage tungsten atomic data in SOLPS	D Coster	IPP
09:30 – 09:45	A New Method to Calibrate VUV Spectrometer-Detector System using Penning Discharge Lamp and ADAS code	R Prakash	BIT
09:45 – 10:00	Overview of the Auburn/Rollins/University of Strathclyde collisional methodologies	C Ballance	Auburn University

Coffee

## Session 2 : Evolving interaction of ADAS in European fusion

Chaired by: M O'Mullane

10:30 – 11:15	ADAS-EU and ADAS evolution	H Summers	ADAS
11:15 – 11:25	Expected activity at Garching	T Pütterich	IPP Garching
11:25 – 11:35	ITER and timescale of atomic and molecular data needs	D Thomas	ITER
11:35 – 11:45	Expected activity at FZJ	S Brezinsek	FZJ
11:45 – 11:55	Expected activity at EFDA-JET	K-D Zastrow	UKAEA

Lunch (12:30)

## Session 3 : Fundamental data and ADAS

Chaired by: V Stancalie

14:00 – 14:15	Molecular population modelling	D Wuenderlich	University of Augsburg
14:15 – 14:30	Absolute partial cross sections and kinetic energy analysis for the electron impact ionization of ethylene	N Endstrasser	Universität Innsbruck
14:30 – 14:45	Reactive collisions between electrons and molecular ions: H <sub>2</sub> <sup>+</sup> , CH <sup>+</sup> and isotopomers of fusion interest	I Schnedier	Université du Harve
14:45 – 15:00	ATOM: calculating fundamental atomic data	I Beigman	Lebedev Institute
15:00 – 15:15	Collisions of Be <sup>4+</sup> and hydrogen	K Igenbergs	TUW
15:15 – 15:30	Atomic structure investigations of heavy atoms and ions	E Biémont	ULG

Coffee

## Session 4 : Observational and modelling anomalies

Chaired by: R Prakash

16:00 – 16:15	Carbon and argon S/XB coefficients do not quite fit	A Pospieszczyk	FZJ
16:15 – 16:30	Relevance of atomic population data to the MSE diagnostic on MAST	C Michael	UKAEA
16:30 – 16:45	Tracking of metastable states in ERO code: modelling of Be experiments at PISCES-B	D Borodin	FZJ
16:45 – 17:00	ERO modelling of hydrocarbon transport and spectroscopy in the injection experiments at TEXTOR	Rui Ding	FZJ

Steering Committee Meeting (17:00–18:00)

Dinner (18:30)

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October 1, 2008

## Session 5 : Complexity

Chaired by: K Ikeda

09:00 – 09:20	Spectroscopy at TEXTOR	W Biel	FZJ
09:20 – 09:35	Towards a quantitative interpretation of neutral beam slowing down spectra?	E DeLabie	FOM
09:35 – 09:50	Modelling of spectral line shapes for magnetic fusion plasmas	Joël Rosato	Université de Provence
09:50 – 10:05	Population kinetics of highly-excited states of Ar XVIII	O Marchuk	FZJ
10:05 – 10:20	Spectral feature synthesis	C Nicholas	University of Strathclyde

Coffee

## Session 6 : Astrophysical notices

Chaired by: D Humbert

11:00 – 11:20	International X-ray Observatory	R Smith	NASA
11:20 – 11:35	Increasing plasma parameter range of DEM analysis	A Giunta	University of Strathclyde
11:35 – 11:50	APAP: Directions and goals	Guiyun Liang	University of Strathclyde
11:50 – 12:05	K-shell photoionization calculations of the Ca iso-nuclear sequence	M Witthoef	NASA
12:05 – 12:20	DEM prediction from impulsive heating simulations	A Lanzafame	University of Catania

Lunch (12:30)

## Session 7 : New avenues for models, experiments and diagnostics

Chaired by: K Behringer

14:00 – 14:15	Tokamak operation with tungsten	R Neu	IPP
14:15 – 14:30	Tungsten baseline and strategies for improvements	A Foster	University of Strathclyde
14:30 – 14:45	Opportunities for European supercomputing	Th Lippert	JSC — <i>nb: not confirmed</i>
14:45 – 15:00	Charge exchange in collisions of Hydrogen and Helium with Low-Z Impurities: underlying data for pellet-based active diagnostics of LHD	I Tolstikhina	Lebedev Institute

Coffee

## Session 8 : Atomic data in a connected world

Chaired by: E Rachlew

15:30 – 15:50	Lessons in fostering atomic data provision	R Clark	IAEA
15:50 – 16:10	ITM and theoretical data	D Coster	IPP
16:10 – 16:30	OPEN-ADAS and data integrity	A Whiteford	ADAS
16:30 – 16:45	Explaining the flow of fundamental data into ADAS	M O'Mullane	ADAS

## Session 9 : Near and mid term future for ADAS

Chaired by: R Guirlet

16:50 – 17:00	Summary of past 12 months	A Whiteford	ADAS
17:00 – 17:15	Scientific directions for the next few years	H Summers	ADAS

Coffee

## Session 10 : Introspection and an opportunity to grumble

Chaired by: M von Hellermann

End of Workshop