Vienna Node Activities

Friedrich Kupka

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Vienna Node Team Members

Friedrich Kupka → **Institute of Mathematics**

Theresa Lüftinger → **Institute for Astronomy**

Christian Stütz → **Computer Centre of the University**

Werner W. Weiss → **Institute for Astronomy**

Team Activities

- Friedrich Kupka
  - node lead since April 2010 (deputy before that)
  - preparations for annual meeting in 2012 in Vienna (WP3)

- Christian Stütz
  - work on VALD related to future WP4 activities and VAMDC services (among others now VALD is running on its own, dedicated server)

- Theresa Lüftinger
  - participation in JRA1-2 meeting in Paris, February 2010
    → database census (WP6), see also
    http://voparis-twiki.obspm.fr/twiki/bin/view/VAMDC/Jra1-2Workshop1
  - preparations for annual meeting in 2012 in Vienna (WP3)

- Werner W. Weiss
  - node lead till April 2010 (will continue as deputy) (WP3)

Purpose of Database Census

Census of DB to be integrated into VAMDC
with respect to the following criteria:

1) What is the primary index/parameter of the Database (e.g. wavelength, element, transition, etc.)?

2) Which physical parameters the DB contains can be used for extraction?

3) What kind of discrete parameters does each DB contain, e.g. isotopes, species, list of species, molecular configuration, etc. ?

4) What kind of extraction units does each DB offer?

5) Does the respective DB offer extraction following additional conditions - and if yes, which ones - like e.g.'extracting only data with known Landé g-factors', etc.?

* .... further details available in an attached document
tbd .... has to be further clarified with the DB representatives
no information yet .... DB representative did not yet provide an answer to the specific question

16.04.2010   Theresa Lueftinger, UNVIE   2

Example from Database Census

DB	1) What is the primary index/parameter of the Database
KIDA, Bordeaux *	chemical species
CH4 DB (under construction), Dijon *	frequency or wavenumber (under construction, some info on planned structure available)
CH2H4 DB (under construction), Reims *	frequency or wavenumber (under construction, some info on planned structure available)
VALD, UU, UNIVIE, INASAN	wavelength, element + ionization stage
BASECOL, LMPAA	Elements, i.e. target molecules or atoms, then colliding molecule or atom, Rate Coefficients, Frequencies, Energy levels, Einstein Coefficients, Authors
S&MPO, Tomsk, Reims?	wavenumber
GhoSST (band list DB), Grenoble	band list: wavenumber
CDSD, Tomsk	wavenumber
ices, OU	1) molecule, 2) infrared, 3) ultraviolet
HITRAN, UCL, Harvard * ExoMol (J. Tennyson), Ucl	frequency
PAH, Cagliari-Toulouse	"molecule", where different ionization states are considered different "molecules";
ices (LASP), Cagliari	Molecule, ice mixture composition
UMIST, Belfast	Species ID - Primary Key [A unique internally used integer], Species Structural Name - Unique Key [a string]. Note that there are several elements in this list, as well as the electron
CDMS, Cologne	current version: species (one species corresponds to one analysis (e.g. ND2H ground state), frequency, intensity; new mysql version: molecule, isotopolog, species, frequency

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Preparations for 2012 Meeting

- Investigation of dates and venues
  - a suitable venue would be at the main campus of Vienna University (location, facilities, costs are all optimal)

  - constraints on time (would have to be outside term time)

  - perliminary reservation made for last week of February 2012 (can still be moved or cancelled at no costs)

  - awaiting further decisions within VAMDC boards (particularly with respect to a meeting around a possible ICAMDATA meeting in Vienna in 2012)

…THANK YOU FOR YOUR TIME !