The Virtual Atomic and Molecular Data Centre (VAMDC): Science Use Cases and the VAMDC Consortium

M.L. Dubernet[1], Y.A. Ba[1], N. Moreau[1], C.M. Zwölf[1] and VAMDC Consortium[2]

[1] LERMA2, UMR8112 du CNRS, Observatoire de Paris, 5 Place Janssen, 92195 Meudon Cedex, France.

[2]http://www.vamdc.eu

The Virtual Atomic and Molecular Data Centre (VAMDC, http://www.vamdc.eu) has created an interoperable e-science infrastructure that currently inter-connects about 27 atomic and molecular databases with the number of connected databases increasing every year. The data can be queried and retrieved in a single format from a general portal (http://portal.vamdc.eu) and VAMDC is currently developing standalone tools to retrieve and handle the data. Currently VAMDC aims at improving the services for specific communities with up till now a strong emphasis on the physics and chemistry of the interstellar medium. The latest tools will be presented within the context of science use cases, in particular the SPECTCOL tool [1, 2] and the connection between VAMDC and the Virtual Observatory tools. In addition a general outline of the VAMDC Consortium activities will be provided. The paper aims at encouraging feedbacks from users and at showing the potential of the VAMDC Consortium for research, education, industry and outreach.

References

[1] M.L. Dubernet, L. Nenadovic, M. Doronin, ADASS XXI Conference, ASPCS, Vol 461, p225 (2012)
[2] Y.A. Ba, L. Nenadovic, "SPECTCOL Guide", http://www.vamdc.eu/software