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Currículum Vitae

Last update: 13 September 2005

Name: Daniel Sahagún Sánchez
Date and place of birth: 28 /June/ 1977 , Mexico city
Nationality: Mexican

Academic history

1996-2001
First degree in physics, Faculty of Science, National University of Mexico (UNAM). Undergraduate thesis title *Calculation of the Spectrum of* Ce^{3+} *and* Ce^{4+}*, and Comparison with the experiment.*

2001-2002
One academic year of graduate research, Department of Physics, The University of Manchester, Manchester, United Kingdom. Research on the *Properties of High Tilted Liquid Crystals.*

2002-2005
PhD in Physics, Centre for Cold Matter, Blackett Laboratory, Imperial College, London, U. K.. Head of the group Edward Hinds, Professor of physics. Research topic *Cold Atoms in Magnetic traps*

- **Scholarships, awards and working experience**

1999
Fellowship as research assistant, awarded by the Dependency for Academic Support (DGAPA), UNAM through the project *Transport and espectroscopy of atomic ionic masses in high electromagnetic fields*, responsible Dr. Jaime de Urquijo Carmona.

1999
Fellowship as research assistant awarded by DGAPA, UNAM, through the project *Espectroscopy of Rydberg atoms,* responsible Dr. Carmen Cisneros Gudiño.

2000-2001

Scholarship for undergraduate thesis warded by CONACyT through the project *Complete experiments of Berilium,* responsible Dr. José I. Jiménez Mier y Terán.

2001
Teacher assistant of Dr. José I Mier y Terán at the Faculty of Science, UNAM in the lecture *Heat, Waves and Fluids*.

2001-2006
Scholarship for overseas postgraduate studies awarded by CONACyT.

2003
Prize J. Phys. B to the best poster at the first British meeting of Quantum, Atomic and Molecular Physics (QUAMPS), Milton Keynes, United Kingdom.

2004
Teacher assistant at the physics department of Imperial College, London. First year lecture of *Mathematics and Theoretical Physics*.

- **Conferences**

1998
XLI Conference of the Mexican Society of Physics, San Luis Potosí, San Luis Potosí, México. Participation with the poster *Refraction index in an inhomogeneous medium* which was published in the memories of the event.

1999
XLII Conference of the Mexican Society of Physics, San Luis Potosí, San Luis Potosí, México. Participation with the posters *Movility of ions fragment of* CHF_3 *y* CDF_4 *in their parent gases* and *Study of* CHF^{2+} *dissociation in Ar* which was published in the memories of the event.

2002
XIV International of Liquid Crystals, Edinburgh, Scotland, U.K.. Author in the poster *Characterisation of High Tilted Liquid Crystals* presented by the group of Liquid Crystals of the University of Manchester.

2003
Meeting of the European network Atom Chips for Quantum Information Research (ACQUIERE), Heidelberg, Germany. One of the speakers of the talk *Bose-Einstein Condensate Magnetically on an Atom Chip*

2003
First British meeting of Quantum, Atomic and Molecular Physics (QUAMPS), Milton Keynes, United Kingdom. Participation with the poster *Coupling of Cold Atoms with a Room Temperature Surface,* which was published in the memories of the event.

2005
17th International Conference on Laser Spectroscopy. Cairngorms National Park, Scotland, 19th - 24th June 2005. Participation with the poster *Towards an atom chip interferometer.*

- **Publications**

M. P. A. Jones, C. J. Vale, D. Sahagun, B.V. Hall, and E. A. Hinds, *Spin coupling between cold atoms and the thermal fluctuations of a metal surface,* Phys. Rev. Lett. **91** 080401 (2003)

M. P. A. Jones, C. J. Vale, D. Sahagun, B. V. Hall, B. E. Sauer, E. A. Hinds, C. C. Eberlein, K. Furusawa and D. Richardson, *Cold atoms near magnetic and dielectric surface*, to appear in Proceedings of the 16th Conference on Laser Spectroscopy (World Scientific, Sinagpore 2004), p.223-230.

H. F. Gleeson, Y. Wang, S. Watson, D. Sahagun Sanchez, J. W. Goodby, M. Hird, A. Petrenko and M. A. Osipov, *On the temperature dependence of the tilt and spontaneous polarisation in high tilt antiferroelectric liquid crystals.* J . Mater. Ch em. **1 4** , 1 4 8 0 – 1 4 8 5 (2 0 0 4)

M. P. A. Jones, C. J. Vale, D Sahagun, B.V. Hall, C. C. Eberlein, B. E. Sauer, K. Furusawa, D. Richardson and E. A. Hinds, *Cold atoms probe the magnetic field near a wire,* J. Phys. B: At. Mol. Opt. Phys. **37** L15–L20 (2004)

S. Eriksson, M. Trupke, H. F. Powell, D. Sahagun, C. D. J. Sinclair, E. A. Curtis, B. E. Sauer, and E. A. Hinds, *Integrated optical components on atom chips,* Eur. Phys. J. D, DOI: 10.1140/epjd/e2005-00092-x (2005)