Curriculum Vitae

# Paul Sánchez

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## PERSONAL


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| Date of Birth: | 6th of December 1976 | Email: | diego.sanchez-lana@colorado.edu |
| Nationality: | Ecuadorian | Homepage: | http://ccar.colorado.edu/sanchez.html |
| Marital status: | Single | | |
| Languages: | Spanish (native), English (fluent), French (advanced), Russian (beginner) | | |


## SELECTED PUBLICATIONS


[1] D. P. Sánchez and D. J. Scheeres. *Dem simulation of rotation-induced reshaping and disruption of rubble-pile asteroids*. *Icarus*, **vol. 218(2)**:pp. 876 – 894, 2012.

[2] P. Sánchez and D. J. Scheeres. *Rotational reshaping and yield stress of rubble-pile asteroids*. In *Lunar and Planetary Institute Science Conference Abstracts*, *Lunar and Planetary Inst. Technical Report*, vol. 42 (2011).

[3] P. Sánchez and D. J. Scheeres. *Simulating asteroid rubble piles with a self-gravitating soft-sphere distinct element method model*. *The Astrophysical Journal*, **vol. 727(2)**:p. 120, 2011.

[4] D. J. Scheeres and P. Sánchez. *Evolution of small, rapidly rotating asteroids*. In *Lunar and Planetary Institute Science Conference Abstracts*, *Lunar and Planetary Inst. Technical Report*, vol. 42 (2011).

[5] P. Sánchez, D. J. Scheeres and M. R. Swift. *Impact driven size sorting in self-gravitating granular aggregates*. In *Lunar and Planetary Institute Science Conference Abstracts*, *Lunar and Planetary Inst. Technical Report*, vol. 41, pp. 2634–+ (2010). Abstract 1533.

[6] D. Scheeres, C. Hartzell, P. Sánchez and M. Swift. *Scaling forces to asteroid surfaces: The role of cohesion*. *Icarus*, **vol. 210(2)**:pp. 968 – 984, 2010.

[7] P. Sánchez and D. J. Scheeres. *Granular Mechanics in Asteroid Regolith: Simulating and Scaling the Brazil Nut Effect*. In *Lunar and Planetary Institute Science Conference Abstracts*, *Lunar and Planetary Inst. Technical Report*, vol. 40, pp. 2228–+ (2009).

[8] P. Richard, A. Valance, J.-F. Metayer, P. Sánchez, J. Crassous, M. Louge and R. Delannay. *Rheology of confined granular flows: Scale invariance, glass transition, and friction weakening*. *Physical Review Letters*, **vol. 101(24)**:248002, 2008.

[9] A. T. Catherall, P. López-Alcaraz, P. Sánchez, M. R. Swift and P. J. King. *Separation of binary granular mixtures under vibration and differential magnetic levitation force*. *Phys. Rev. E*, **vol. 71(2)**:p. 021303, Feb 2005.

[10] P. Sánchez, M. R. Swift and P. J. King. *Stripe formation in granular mixtures due to the differential influence of drag*. *Physical Review Letters*, **vol. 93(18)**:184302, 2004.

[11] P. Biswas, P. Sánchez, M. Swift and P. King. *Numerical simulations of air-driven granular separation*. *Phys. Rev. E*, **vol. 68**:p. 050301(R), 2003.

[12] P. Sánchez and A. Stashans. *Computational study of Nb-doped $SrTiO_3$*. *Materials Letters*, **vol. 57(12)**:pp. 1844 – 1847, 2003.

[13] A. Stashans, H. Pinto and P. Sánchez. *Superconductivity and jahn-teller polarons in titanates*. *Journal of Low Temperature Physics*, **vol. 130**:pp. 415–423, 2003. 10.1023/A:1022260822806.

[14] M. A. Naylor, P. Sánchez and M. R. Swift. *Chaotic dynamics of an air-damped bouncing ball*. *Phys. Rev. E*, **vol. 66(5)**:p. 057201, Nov 2002.

[15] P. Sánchez and A. Stashans. *Computational Studies and Comparison of Nb- and La-Doped $SrTiO_3$*. *Physica Status Solidi B Basic Research*, **vol. 230**:pp. 397–400, Apr 2002.

[16] P. Sánchez and A. Stashans. *Computational study of structural and electronic properties of superconducting La-doped $SrTiO_3$*. *Philosophical Magazine, Part B*, **vol. 81**:pp. 1963–1976, Dec 2001.

[17] A. Stashans and P. Sánchez. *A theoretical study of la-doping in strontium titanate*. *Materials Letters*, **vol. 44(3-4)**:pp. 153 – 157, 2000.


## EDUCATION

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| 2001-Jan 2005 | PhD in Theoretical Physics at the School of Physics and Astronomy,University of Nottingham. Thesis title: Fluid driven Separation and Pattern formation in Granular Media. |
| 1994-2000 | Physics - Specialty in Material Science, Equivalent to MSc, Escuela Politécnica Nacional, Quito, Ecuador. Thesis title: Computational Quantum-Chemical Study of the Electronic and Structural properties of Cubical and Tetragonal La-doped $SrTiO_3$. |
| 1988-1994 | Physics and Mathematics, Equiv. British A levels, Colegio Técnico Aeronáutico de Aviación Civil, Quito, Ecuador. |

## JOB HISTORY

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| Sept 2008 - Present | Research Associate, Colorado Centre for Astrodynamics Research - CCAR, Department of Aerospace Engineering Sciences, University of Colorado at Boulder, USA. |
| April 2008 - Aug 2008 | Director of the Department of Scholarships and International Cooperation, National Secretariat of Science and Technology - SENACYT, Quito, Ecuador. |
| Mar 2006 - Mar 2007 | Postdoctoral position at the GMCM (now part of the Institute de Physique de Rennes - IPR); hired by the University of Rennes 1 and the CNRS. |