Óscar Andrés Nájera

CONTACT INFORMATION	Cap. Rafael Ramos E2-254 Casa # 2 Quito, Ecuador	*home:* +(593-2) 241-2446 *mobile:* +(593-9) 643-9206 *e-mail:* najera.oscar@gmail.com *www:* http://titan-c.github.com

RESEARCH INTERESTS

Solid State Physics, Statistical Mechanics, scientific programming & computational systems analysis

EDUCATION

Escuela Politécnica Nacional, Quito, Ecuador

Physics Diploma Student   **August 2006 - present**

- Thesis Topic: "Estimation, by computer simulation, of the exchange energy dispersion between polar nano-regions in $Pb_xBi_4Ti_{3+x}O_{12+3x}; x = \{2,3\}$ relaxor ferroelectrics"
- Advisor: Professor Luis Lascano
- Expected graduation date: July, 2012

HONORS AND AWARDS

Physics Olympiad 1st place, Escuela Politécnica Nacional   **2010**

ACADEMIC EXPERIENCE

Escuela Politécnica Nacional, Quito, Ecuador

Student   **August 2006 - present**
Includes current research and coursework

Laboratory and teacher's Assistant   **August 2011 - present**
Responsible of Experimental Physics laboratory in subjects like Newtonian Mechanics, Electromagnetism and Optics. Shared responsibility for lectures, homework assignments and grades.

International Center for Theoretical Physics, Trieste, Italy

Invited Student   **Feb 20 - Mar 2, 2012**
Participation and presentation of research work at the *"Advanced School on Scientific Software Development"*

CONFERENCE PRESENTATIONS

Nájera, O.: "Phase transitions in random interaction Ising-like models" **In:** XVI ELAVIO, *Latin American School in Operations Research*, Feb 2012.

OTHER PUBLICATIONS

Nájera, O.: "Estimation, by computer simulation, of the exchange energy dispersion between polar nano-regions in $Pb_xBi_4Ti_{3+x}O_{12+3x}; x = \{2,3\}$ relaxor ferroelectrics", Thesis Preliminary Examination. Department of Physics - Escuela Politécnica Nacional, April 2012.

COMPUTER SKILLS

- Languages: C/C++, Linux shell scripting, Python, Php, Matlab/Octave, LaTeX
- Operating Systems: Linux(Gentoo)

LANGUAGES

- Spanish: Native speaker
- English: Fluent speaker
- German: Fluent speaker