

# Katherine Luna

kluna@stanford.edu

**Current:** Langebrug 2A apartment 3, 2311 TK Leiden, Netherlands (071) 527-5515

**Permanent:** 18026 Rodarte Way Encino, CA 91316 USA 818-345-0944

## EDUCATION:

- 9/06-??? **Stanford University**, Stanford, CA  
Expected Ph.D. in physics
- 9/05-Present **Leiden University – Lorentz Institute for Theoretical Physics**, Leiden, Netherlands  
Fulbright Fellow.
- 9/02-6/05 **Stanford University**, Stanford, CA  
Bachelor of Science in Physics and Mathematics, 6/05  
Minor in Latin American Studies.
- 9/01-5/02 **Harvard University**, Cambridge, MA
- 6/02-8/02 **Harvard Summer School in Peru**  
Studied History and Literature of the Andean Region. Discussed current events with Peruvian political leaders and poets.

## AWARDS:

Fulbright Fellow  
Bell Labs Graduate Fellowship  
Honorable Mention National Science Foundation Graduate Fellowship  
Multiple highest honors awards from El Centro Chicano at Stanford  
Cap & Gown Honor Society  
National Distinguished AP Scholar  
Three-time 1<sup>st</sup> place winner-California State Fair Best of Show Art Competition  
Four-time Best of Show winner-Ventura County Fair Art Competition, Pro-Art Awards, Director's Awards, Judge's Awards, Best of Class Awards  
Director's Award in Adult Amateur Art Competition-Ventura County Fair  
Otis Gold Portfolio Award  
2<sup>nd</sup> Place Award-Rotary Art Competition

## EXPERIENCE:

- 9/05-Present **Physics Department, Leiden University** Leiden, Netherlands  
**Lorentz Institute for Theoretical Physics**  
**Fulbright Fellow:** Studying and researching theoretical condensed matter physics with Professor Jan Zaenen. Use of Fortran to investigate inhomogeneous, stripe like states in doped Mott-insulators, within the SU(2) gauge theoretical description. Panelist and poster presenter at Fulbright Science Conference in Berlin.
- 6/04-5/05 **Physics Department, Stanford University** Stanford, CA  
**Research Assistant:** Honors Thesis - Modeling and software development for various configurations of superconducting microwave cavities to test for space-time anisotropy terms that might exist from Lorentz violations. Advisor was Professor John Lipa. Work was presented at the CPT and Lorentz Symmetry conference at Indiana University. Co-author in a paper entitled "Prospects for Improved Lorentz Violation Measurements Using Cryogenic Resonators," Proceedings of the Third Meeting on CPT and Lorentz Symmetry, V.A.Kosteletzky, ed., World Scientific, Singapore, 2004. Research was a significant component to Professor Lipa's proposed NSF grant.
- 8/03-9/03 **National Defense Council Foundation** Alexandria, VA.  
**Research Assistant:** Researched, published, and edited articles for newspapers relating to narco-guerrilla warfare and small intensity conflicts. Improved internship manual on own initiative. Aided and supervised the organization of medical supplies to Colombia. Published Letter to the Editor, "Rehabilitating Peru," Washington Times 9/03.

## Katherine Luna

Page 2

- 6/02 & 9/02     **Biophysics Lab, California Institute of Technology**     Pasadena, CA  
**Research Assistant:** Worked in Professor Rob Phillip's biophysics lab running and preparing experiments. Use of Gel Electrophoresis, Polymerase Chain Reaction, Atomic Force Microscope, splicing and recombining DNA.
- 10/01-5/02     **Student Advisory Board for David Rockefeller Center  
for Latin American Studies, Harvard University**     Cambridge, MA  
**Sub-Committee Leader:** Created and headed the science and technology in Latin America sub-committee. Created questionnaires, interacted with professors, ambassadors, and other group organizations on campus.

### EXTRACURRICULAR:

- 9/05-Present     Leiden Model United Nations  
9/05-Present     Running with Leiden Atletiek  
2/04-6/05        Women in Physics  
9/02-6/05        Stanford Triathlon Club  
9/03-6/05        Stanford Soccer Club  
12/03-6/05       Stanford Ski Team  
6/98-9/04        ju-jitsu  
6/89-present     golf  
6/92-present     violin  
6/92-present     art  
9/01-5/02        Harvard Track and Field Team  
9/01-5/02        tutored 4<sup>th</sup> grade, Chado Society: art of Japanese tea ceremony, dorm intramural representative

### ADDITIONAL INFORMATION:

**Languages:** Fluent in Spanish. Trained in making presentations, conducting research, writing, and editing.

**Travel:** Netherlands, Germany, China, Hong Kong, Taiwan, Macau, Italy, Peru, Spain, Mexico, England, and France

**Computer:** Programming in C++, C, Fortran, Maple, PV-Wave, Matlab, and Mathematica. Experience with Macintosh/IBM.  
Software includes MSWord, Excel, WordPerfect, and PowerPoint.