CURRICULUM VITAE

DR. ANDREAS BILL

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Professional Activities

2010 - present	Professor, California State University, Long Beach.
2023 - 2024	Visiting professor, Université Paris-Saclay & CNRS, Laboratoire de Physique des Solides, Orsay, France
2016 - 2022	Department Chair. Physics & Astronomy, California State University, Long Beach, CA
2015 - 2018	Chair line of the Far West Section of the American Physical Society. (2015: Vice-Chair, 2016: Chair-Elect, 2017: Chair, 2018: Past chair)
2010 - 2016	Director of the graduate program, Associate Chair of the department.
2013-2014	Visiting Professor, Instituto de Ciencia de Materiales de Madrid (ICMM-CSIC)
2009	Visiting Professor , Bremer Institut für Angewandte Strahltechnik (BIAS), Universität Bremen, Germany
2005 - 2010	Associate Professor, California State University, Long Beach.
1999-2004	Research Scientist, Paul Scherrer Institute (PSI) & ETH Zürich, Switzerland.
1998	Research Scientist, Max Planck Institute for Physics of Complex Systems, Dresden, Germany.
1996-1997	Post-doctoral researcher, Lawrence Berkeley National Laboratory.
1989	Full-time substitute teacher for physics, mathematics and chemistry, high-schools, Geneva, Switzerland.

Education & Honors

2019-2022	KITP Scholar, Kavli Institute for Theoretical Physics, UC Santa Barbara
2018	President Award for Outstanding Faculty Achievement, California State University Long Beach.
2011	Faculty Award for Excellence, College of Natural Sciences & Mathematics, CSULB.
1995	Dr. rer. nat. in Theoretical Physics, <i>suma cum laude</i> University of Stuttgart, Germany. Advisor: Prof. E. Sigmund.
1989	Diploma in Physics (Dipl. Eng. Phys.) , <i>magna cum laude</i> Swiss Federal Institute of Technology Lausanne (EPFL). Advisor: Prof. P.A. Martin.
1988	Conservatoire Populaire de Musique de Genève, Switzerland, <i>suma cum laude</i> Instrument: Organ. Class of M. Extermann. Prix du Conseil d'État de Genève.

Funding

Research Funding (external)

2021-2024	CSULB-OSU Partnership for Education and Research (PREM), NSF-2122199
2013-2018	National Science Foundation Grant, DMR-1309341.
2011-2012	Army High Performance Computing Research Center Grant II, Research & Infrastructure Develop. Program for Hispanic Serving Inst.
2010-2011	Army High Performance Computing Research Center Grant I, Research & Infrastructure Develop. Program for Hispanic Serving Inst.
2009-2013	National Science Foundation Grant, DMR-0907242.
2009	Faculty Research Visiting Grant from the DAAD (German Scientific Exchange Services).
2007-2010	Research Corporation Grant, Cottrell College Science Award.
1998	Research Fellow, Max Planck Institutes, Dresden, Germany.
1997	Postdoctoral Fellow, Naval Research Laboratory, Washington D.C.
1996, 1997	Postdoctoral Fellow, Swiss National Science Foundation, Switzerland.

Research Funding (intramural)

2011-2017 2023-2024	RSCA grant, CSU Long Beach (annually assigned time)
2022-2023	Difference in Pay Leave, (at LPS, U. Paris-Saclay, Orsay, France),
2013-2014	Difference in Pay Leave, (at ICMM, Madrid, Spain),
2006-2009	Scholarly and Creativity Activities Committee Award, CSU Long Beach (assigned time for 3 semesters).

Teaching & Service Funding

2014-2017	American Physical Society Bridge Program Site (Grant PI & director of the site)
2014	American Physical Society, Minority Speaker Program Grant, (for colloquium guest).
2010-2012	Army High Performance Computing Research Center Grant (see research)
2008, 2010	American Physical Society, Women Speaker Program Grant, (for colloquium guest).

CSU Long Beach Service

Department Chair (2016-2022)

University Resource Council, CSU Long Beach (2017-2018, 2020-2022)

Advisory Council on Enrollment Management (2015-2018)

Member at large of the Academic Senate, CSU Long Beach (2013-2015)

Associate Chair of the department (2012-13, 2014-16)

Department Graduate Advisor (director of the graduate program, 2011-2016)

Department committees (served at various times on the following committees)

Department Council, Faculty Search, graduate committee,

RTP, curriculum committee, library representative.

Responsible for the department website (2006-2015).

Coordinator of the Physics Colloquium (several years).

Member of Master's theses committees.

Juror at the annual CSULB Student Research Competition.

Faculty Advisor of the CSULB International Student Fellowship.

Member of the Faculty support group of the Veritas Forum.

Scientific Community Service

Continuous Service

External reviewer for Physical Review B, Physical Review Letter, Journal of Superconductivity & Novel Magnetism, European Journal of Physics B, Physica A, Physics Letters, Journal of the Physics & Chemistry of Solids

Reviewer for NSF, SSRL, PhD theses, etc.

International Workshop

Co-organizer & invited speaker of the international workshop (Colombia, June 2011)

"1st Centennial of Superconductivity: Trends in Nanoscale

Superconductivity and Magnetism"

In charge of the Proceedings for the conference.

American Physical Society (APS), Far West Section (FWS)

Chair line of the Far West Section of APS (2015-2018).

FWS annual meeting at CSU Long Beach: Chair and host of the conference (2015).

Member elect of the executive committee (2009-2012).

Representative of the APS on Capitol Hill visit (May 2011, Jan. 2016, 2017, 2018)

Representative of the CA-APS section at the annual convocation (May 2011, Jan. 2016, 2017, 2018).

FWS APS Newsletter editor for 2011, 2012, 2017, 2018.

FWS annual meeting at SLAC Member of the invited speaker committee (Oct. 2011).

FWS annual meeting at Caltech Chair of the invited speaker committee and abstract sorting committee member (October 2010).

Chair of the website committee of the APS (redesign of the content of the website)

Bridge Program: Member of the APS Bridge Program Architect's Council (2010-present). To build bridges between undergraduate & Master's granting institutions with Ph.D. granting institutions (since 2014).

California Professoriate for Access to Physics Careers (CPAPC)

Representative for CSU Long Beach (with C. Kwon).

GRE Bootcamp Initiated the creation of the boot camp weekend for southern California and organized with C. Kwon and P. Jaikumar since 2011 (led the camp 4 times).

Group members & Master's theses (at CSULB)

Current members:

C. Garcia, F. Kosarefrf, M. Malabanan, K. Russel, M. Maldonado, M. Maalouf.

Former members - Master's students:

F. Mendez Master's Thesis in Physics, CSU Long Beach, 2023.

Thesis: "Determining the effect of applying an external magnetic

field to diffusive superconducting-magnetic proximity systems"

L. Tandy Master's Thesis in Physics, CSU Long Beach, 2023.

Thesis: "Clean superconducting-magnetic proximity systems in

the presence of an applied electromagnetic field"

T. Bowman Master's Thesis in Physics, CSU Long Beach, 2021.

Thesis: "Pair correlations dependence on system parameters in

magnetic trilayer Josephson junctions"

N. Werner Master's Thesis in Physics, CSU Long Beach, 2021.

Thesis: "Plasmon spectrum of twisted bilayer graphene"

C.M. Burgess Master's Thesis in Physics, CSU Long Beach, 2020.

Thesis: "Coulomb potential on a lattice using graph theory"

R. Wang Master's Thesis in Physics, CSU Long Beach, 2019.

Thesis: "Numerical analysis of the critical temperature in

superconducting-magnetic proximity systems"

Dr. A. Garcia Master's Thesis in Physics, CSU Long Beach, 2018.

Thesis: "Parameter Dependence of Pair Correlations in

Clean Proximity Systems"

B. Chan Master's Thesis in Physics, CSU Long Beach, 2017.

Thesis: "Hyperboloid-Parameterized Description Of Diffusive

Superconducting-Magnetic Hybrid Systems"

Dr. L. Leal Master's Thesis in Physics, CSU Long Beach, 2016.

Thesis: "Pair Correlations in Clean Magnetic Josephson Junctions"

J. Brugger Comprehensive exam in Physics, CSU Long Beach, Fall 2016.

G. Wang Master's Thesis in Physics, CSU Long Beach (2015).

Thesis: "Numerical Simulation of the Random Nucleation and

Growth Model in Thin Films"

A.K. Moke Master's Thesis in Physics, CSU Long Beach (2013)

Thesis: "Superconducting Critical Temperature of Inhomogeneous

Magnetic Proximity Systems"

H. Sadeghi Master's Thesis in Physics, CSU Long Beach (2013)

Thesis: "The Dielectric Function and Plasmons in Graphene"

Dr. T.E. Baker Master's Thesis in Physics, CSU Long Beach (2012)

Thesis: "Superconducting-Magnetic Proximity Systems and

Mathematical Analogies to Classical Mechanics"

K.S. Lokovic Master's Thesis in Physics, CSU Long Beach (2011).

Thesis: "Non-Equilibrium Grain Size Distribution for

Generalized Growth and Nucleation Rates"

Dr. J. de Rojas Master's Thesis in Physics, CSU Long Beach, 2011.

Thesis: "Electronic properties of graphene multilayers

and graphite thin films."

Dr. A. Richie-Halford Master's Thesis in Physics, CSU Long Beach, 2010.

Thesis: "Numerical Modeling of the Singlet Proximity Effect

in a Superconductor-Ferromagnet Trilayer."

A.V. Teran Master's Thesis in Physics, CSU Long Beach, 2009

Thesis: "Modeling the grain size distribution during

solid phase crystallization of Silicon."

Undergraduate student project supervision

N. Werner Summer 2017 (supported by NSF grant)

J. Mejia Sandoval Honors Student (Thesis 2016)

J. Wimbish Summer 2015 (supported by NSF grant)

M. Campos Winter & Spring 2012

O. Icreverzi Summer 2011 (supported by NSF grant)
A. Atallah Summer 2011 (supported by NSF grant)

F. Blumenthal Spring & summer 2010 (supported by Research Corporation grant)
L. Mitchell Spring & summer 2009 (supported by Research Corporation grant)

A. Hartman Winter 2009

C. Thayn Winter 2008 & summer 2008 (supported by Research Corporation grant)

N. Squires Spring, summer & fall 2007

J. Alvarez Winter 2007

E. Karadayi Summer 2007 (supported by Research Corporation grant)

K. Harness Spring, fall, winter 2006, spring, summer 2007