Nicola A. Spaldin

Publications and Presentations
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Books

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Calculation of the electronic structure of silicon nanocrystals, N. A. Hill and K. B. Whaley, Materials Research Society Proceedings **358**, 25 (1995).

Invited Presentations

2021

International Conference on Advanced Materials and Devices, Jeju Island, South Korea (Online)
Layer and spontaneous polarizations in perovskite oxides and the influence of their interplay on bulk and surface properties

Berlin-Brandenburg Academy of Sciences, workshop on New Trends in Theoretical Materials Research and Chemistry (Online)
The "Modern" Theory of Polarization 30 years on. What's new?

Stonybrook University Materials Department Seminar (Online)
In search of electrostatic happiness

University of Warwick, Condensed Matter Physics Seminar (Online)
From Condensed Matter to Cosmology: Studying the early universe under the microscope

University of Geneva, Postdoc Day (Online)
Finding happiness and Saving the World through Materials Science

Trends in Magnetism, Palermo, Italy (Online)
Hidden, entangled and resonating order

MaX School on Electronic Structure Calculations, International Centre for Theoretical Physics, Trieste (Online)
Finding happiness and saving the world with electronic structure calculations

Annual Symposium of Students in Materials Science & Engineering, Materials Research Institute of the National Autonomous University of Mexico (Online)
Finding happiness and saving the world using Materials Science

Materials Research Society Spring Meeting (Online)
On the happiness of ferroelectric perovskite surfaces and its role in water dissociation: The example of $BiFeO_3$

Rennes Institute of Chemistry (Online)
Finding happiness and saving the world using Materials Chemistry

International Workshop on Computational Physics and Materials Science: Total Energy and Force Methods, International Centre for Theoretical Physics, Trieste (Online)
Finding Happiness and Saving the World through Electronic-Structure Calculations

Cambridge University Chemical Society (Online)
Finding happiness and saving the world using Materials Chemistry

UBC Quantum Matter Institute, Condensed Matter Seminar (Online)
Hidden magnetoelectric multipoles in multiferroics and superconductors

2020

Workshop on Dynamic Quantum Matter and Materials, U Florida (Online)
Why hidden magnetoelectric multipoles can't stay hidden at surfaces

MARVEL NCCR Electronics Industry Day (Online)
Multiferroics beyond electric-field control of magnetism

Swiss National Science Foundation Scéance de Reflexion (Online)
Reflections on Academic Collaborations

UC Merced, Physics Colloquium (Online)
From Materials to Cosmology: Studying the early universe under the microscope

Russia Condensed Matter Colloquia (Online)
Transition-metal oxides

Cambridge University Scientific Society (Online)
New materials for a new age

Virtual Science Forum Long Range Colloquium (Online)
From Materials to Cosmology: Studying the early universe under the microscope

International Workshop on Advanced Materials, Ras al Khaimah, UAE
My Favorite Grand Challenges for Materials Chemistry: Cosmic Strings, the Higgs Boson, Dark Matter and Room-Temperature Superconductivity

Jozef Stefan Insitute Colloquium, Ljubljana, Slovenia
From Materials to Cosmology: Studying the early universe under the microscope

Imperial College London, UK, Bauerman Medal Lecture
New materials for a new age

2019

Lawrence Berkeley National Lab. Distinguished Women in Science, Berkeley, CA, USA
Hidden, entangled and resonating order

Alexey Solyanov Memorial Symposium, Zürich, Switzerland
Hidden magnetoelectric monopoles

European Research Council Scientific Seminar, Brussels, Belgium
New Materials for a New Age

Materials Research Society Fall Meeting, Boston, USA
Hidden magnetoelectric monopoles

University of Chicago, Pritzker School of Molecular Engineering Quantum Seminar, IL, USA
Hidden magnetoelectric multipoles in multiferroics and superconductors

Northwestern University, Department of Materials Science and Engineering Dorn Lecture, IL, USA
From Materials to Cosmology; Studying the early universe under the microscope

EPFL Institute of Physics Colloquium, Lausanne, Switzerland
Hidden, entangled and resonating order

Joint European Magnetic Symposia, Uppsala, Sweden (Plenary)
Hidden, entangled and resonating order

International Conference on Materials Chemistry, Birmingham, UK (Plenary)
New Materials for a New Age

Magnetism 2019, Leeds, UK (Plenary)
Hidden magnetoelectric multipoles in multiferroics and superconductors

American Physical Society March Meeting, Boston, USA
Dynamical Multiferroicity

University of Tokyo, Tokyo, Japan
From Multiferroics to Cosmology; Studying the early universe under the microscope

RIKEN, Tokyo, Japan
Hidden magnetoelectric multipoles in multiferroics and superconductors

2018

Science and Cocktails, Copenhagen, Denmark
New Materials for a New Age

Correlated Electrons in Transition-Metal Compounds: New Challenges, Dresden, Germany
Beyond Moscow in the '50s

Royal Society Fellows Research Weekend, Chicheley Hall, UK
New Materials for a New Age

Falling Walls, Berlin
Breaking the walls to the next Materials Age

International Workshop on Oxide Electronics, Les Diablerets, Switzerland
Connecting ferroelectricity and superconductivity in $SrTiO_3$

Leverhulme Research Centre Inaugural Symposium, U. Liverpool, UK (Keynote)
Grand challenges in Materials Chemistry

International Conference on Magnetism, San Francisco, CA (Plenary)
Hidden magnetic order in multiferroics and superconductors

The Durham Lectures, Durham University, Durham, UK
New Materials for a New Age
From Materials to Cosmology: Studying the early universe under the microscope
Hidden magnetoelectric multipoles in multiferroics and superconductors

Paul Scherrer Institute Condensed Matter Colloquium, Villigen, Switzerland
Hidden magnetoelectric multipoles in multiferroics and superconductors

Physikalische Gesellschaft Zürich, Switzerland
From Multiferroics to Cosmology; Studying the early universe under the microscope

Women's Wealth Club, Zürich, Switzerland
New Materials: Essential or Luxury?

Lise Meitner Lecture, DPG Meeting, Berlin, Germany
New Materials for a New Age

Lise Meitner Lecture, DPG Meeting, Erlangen, Germany
From Materials to Cosmology; Studying the early universe under the microscope

British Crystallographic Association Meeting, Warwick UK (Plenary)
From Multiferroics to Cosmology; Studying the early universe under the microscope

Balazs Gyorffy Colloquium, University of Bristol, UK
From Materials to Cosmology; Studying the early universe under the microscope

Gordon Research Conference on Ultrafast Phenomena in Cooperative Systems, Galveston, TX, USA
Dynamical Multiferroicity

Spanish Condensed Matter Physics Meeting, Valencia, Spain (Keynote)
From Multiferroics to Cosmology; Studying the early universe under the microscope

2017

World.Minds, Zürich, Switzerland
New Materials for a New Age

Materials Research Society Fall Meeting, Boston, USA (Mid-Career Award Talk)
Dynamical Multiferroicity

Lise Meitner Lecture, Vienna, Austria
New Materials for a New Age

Bragg Lecture, University College London, UK
From Materials to Cosmology; Studying the early universe under the microscope

Nature Conference on Ferroic Challenges and Opportunties, Xi'an, China
Dynamical Multiferroicity

MPI Quantum Matter Symposium, Berlin, Germany
Dynamical Multiferroicity

International Centre for Theoretical Physics Colloquium, Trieste, Italy
From Materials to Cosmology; Studying the early universe under the microscope

Career Development Workshop for Women in Physics, ICTP, Trieste, Italy
Multiferroics and Me

Diamond Light Source Seminar, Oxfordshire, UK
From Multiferroics to Cosmology; Studying the early universe under the microscope

Dynamic Summer Distinguished Lecture, LANL, Los Alamos, USA
From Materials to Cosmology; Studying the early universe under the microscope

Royal Society New Fellows Seminar, London, UK
Multiferroic Materials for a New Age

International Conference on Strongly Correlated Electron Systems, Prague, Czech Republic
Ferroelectricity, Multiferroicity and Superconductivity

TU Dresden Physics Colloquium, Dresden, Germany
From Materials to Cosmology; Studying the early universe under the microscope

Swedish eSciences Research Center, Stockholm, Sweden
Computing strings, from the atomic to the cosmic

International School on Oxide Electronics, Cargese, France
Theory of multiferroics and magnetoelectrics

French Academy of Sciences (L'Oreal-UNESCO Prize Talk), Paris, France
Multiferroics: Past, present and future

Oxford University Physics Colloquium, Oxford, UK
From Materials to Cosmology; Studying the early universe under the microscope

RIKEN Symposium on Emergent Materials, Tokyo, Japan
Ferroelectricity, multiferroicity and superconductivity

2016

Materials Research Society Fall Meeting, Boston, MA, USA (Symposium X)
Multiferroics, past, present and future

European Physical Society Condensed Matter Division conference, Groningen, the Netherlands (plenary)
Multiferroics from the very small to the very big

Joint European Magnetics Symposia, Glasgow, UK (plenary)
Hidden magnetoelectric multipoles in multiferroics and superconductors

Gordon Conference on Multiferroics, Bates College, Maine, USA
The link between multiferroics, high-temperature superconductivity (and dark matter)

Hermes International Summer School, London, England
Electronic structure calculations for high-energy physics and cosmology

Lennard-Jones Center, Cambridge, England
Master Class: Ferroelectrics and phonons from first-principles

NanoGUNE Colloquium, San Sebastian, Spain
From Multiferroics to Cosmology; Studying the early universe under the microscope

Frontiers of Materials Modeling, Thomas Young Centre 10th Anniversary Symposium, London, UK
Electronic structure calculations for high-energy physics and cosmology

Physics Colloquium, University of Duisburg-Essen, Duisburg, Germany
From Multiferroics to Cosmology; Studying the early universe under the microscope

2015

Stuttgart University and Max Planck Institute Physics Colloquium, Stuttgart, Germany
From Multiferroics to Cosmology; Studying the early universe under the microscope

MRS Fall meeting, Boston MA, USA
Hidden monopolar order in magnetoelectrics and high-T_c cuprate superconductors

Electronic Properties of Modern Materials, Diamond Light Source, UK (keynote)
Hidden monopolar order in magnetoelectrics

Freiburg University Physics Colloquium, Freiburg, Germany
From Multiferroics to Cosmology; Studying the early universe under the microscope

Workshop on Oxide Electronics, Paris, France
Defect chemistry as a control parameter in oxide thin films: Insights from electronic-structure calculations

ETH Physical Chemistry Colloquium, Zürich, Switzerland
From Solid-State Chemistry to Cosmology; Studying the early universe under the microscope

Körber Prize Symposium, Hamburg, Germany
From Multiferroics to Cosmology; Studying the early universe under the microscope

Workshop on spin-lattice computations, Stockholm, Sweden
Why we would like to be able to do spin-lattice computations

Advances in Nanoscience Applications, Cambridge, UK
Magnetic monopoles and room-temperature superconductivity

TRR80 Summer School on Functionality of Correlated Materials, Chiemsee, Germany
Multiferroics

Frontiers in Advanced Materials, Bangalore, India
Hidden monopolar order in magnetoelectrics

Frontiers in Chemical Science, Weizmann Institute, Israel
From Materials Chemistry to Cosmology; Studying the early universe under the microscope

SFB Colloquium, University of Hamburg, Hamburg, Germany
Hidden monopolar order in magnetoelectrics

Advanced Materials and Nanotechnology conference, Nelson, New Zealand (keynote)
From Materials to Cosmology; Studying the early universe under the microscope

Theory of Condensed Matter Seminar, University of Cambridge, UK
From Materials to Cosmology; Studying the early universe under the microscope

Computational Nanomagnetism Seminar, KTH, Sweden
Hidden monopolar order in magnetoelectrics

2014

Royal Society of Chemistry Christmas meeting, Glasgow, UK
From Solid State Chemistry to Cosmology; Studying the early universe under the microscope

St. Andrew's University Joint Physics and Chemistry Colloquium, UK
From Materials to Cosmology; Studying the early universe under the microscope

European Spallation Source Foundation Stone Laying Ceremony, Lund, Sweden
Room temperature superconductivity and the ESS

KTH Physics Colloquium, Stockholm, Sweden
From Materials to Cosmology; Studying the early universe under the microscope

Solid State Chemistry Gordon Conference, New Hampshire, USA
Cosmic strings in multiferroics

INM Leibniz Institute for New Materials, Saarbrücken, Germany
Coupled and competing instabilities in oxide thin films: Insights from electronic-structure calculations

IBM Rüschlikon, Switzerland
From Materials to Cosmology; Studying the early universe under the microscope

Uppsala University Physics Colloquium, Sweden
From Materials to Cosmology; Studying the early universe under the microscope

Chemistry Department Seminar, U. Fribourg, Switzerland
From Materials to Cosmology; Studying the early universe under the microscope

APS March meeting, Denver, CO, USA
Hidden monopolar order in magnetoelectrics

Condensed Matter Physics Seminar, Oxford University, England
Cosmic strings in multiferroics

Tritech Consulting, Stockholm, Sweden
From Materials to Cosmology; Studying the early universe under the microscope

2013

FIRST-QS2C Workshop on Emergent Phenomena in Correlated Materials, Tokyo, Japan
Monopoles in magnetoelectrics

Seminar, Rutgers University, New Brunswick, New Jersey
Monopoles in magnetoelectrics

18th Conference of the European Theoretical Spectroscopy Facility, Luxembourg City, Luxembourg
Why I would like to able to do theoretical spectroscopy

Dynamical Properties of Solids (DyProSo) Workshop, Vienna, Austria
Cosmic strings in multiferroics

Nordita workshop on Superconductivity: The second century, Stockholm, Sweden
Ab initio studies of oxide thin films: What we can and cannot do and why

European School on Multiferroics, Wittenberg, Germany
Multiferroics in high energy physics and cosmology

U. Karlsruhe Physics Colloquium, Karlsruhe, Germany
Cosmic strings in multiferroics

U. Liége Physics Colloquium, Liége, Belgium
Cosmic strings in multiferroics

5th APCTP Workshop on Multiferroics, Singapore
Cosmic strings in multiferroics

U. Geneva Physics Colloquium, Geneva, Switzerland
Cosmic strings in multiferroics

Stanford University Applied Physics Colloquium, Stanford, CA, USA
Cosmic strings in multiferroics

Materials Research Society Spring meeting, San Francisco, CA, USA
Reversible phase transitions in multiferroics and cosmic string formation in the early universe

German Physical Society Meeting, Regensburg, Germany
Cosmic strings in multiferroics

Larmor Lecture, Queen's University, Belfast
From multiferroics to cosmology: Studying the early universe under the microscope

Workshop on Computational Physics and Materials Science: Total Energy and Force Methods, Trieste, Italy
From multiferroics to cosmology with electronic structure calculations

Edgar Lüscher Seminar, Klosters, Switzerland
Simulating cosmic string formation in a frustrated magnet

2012

MRS Fall meeting, Boston MA, USA
Coupled and competing contributions to magnetoelectric response; Insights from electronic structure theory

EPFL Materials Department Colloquium, Lausanne, Switzerland
From multiferroics to cosmology: Scaling behavior and beyond in the hexagonal manganites

CECAM Tutorial: Density functional theory: Basics, response and excitations, Zürich, Switzerland
Magnetism basics

Paul Scherrer Institute, Villigen, Switzerland
A really boring pedagogical lecture on the linear magnetoelectric effect and how to calculate it

Nordic Institute for Theoretical Physics, Stockholm, Sweden
From multiferroics to cosmology: Scaling behavior and beyond in the hexagonal manganites

Royal Society Discussion Meeting – Magnetoelectric phenomena and devices
A really boring pedagogical lecture on the linear magnetoelectric effect and how to calculate it

CSCS User Day, Lugano, Switzerland
From transition metal oxides to cosmic strings

CCCP5 Summer School, Cardiff, U.K.
From transition metal oxides to cosmic strings

IFW, Dresden, Germany
Revisiting the hexagonal manganites: From multiferroics to cosmology (and how electronic structure calculations can help)

Uppsala University Materials Seminar, Sweden
From multiferroics to cosmology (and how electronic structure calculations can help)

University of Frankfurt Physics Colloquium, Germany
From multiferroics to cosmology (and how electronic structure calculations can help)

Ecole Polytechnique, Physics Department, Paris, France
From multiferroics to cosmology (and how electronic structure calculations can help)

Nature conference on Frontiers in Electronic Materials, Aachen Germany
Revisiting the hexagonal manganites; From multiferroic interfaces to cosmic strings

WE Hereus Seminar on New Routes to Single-Phase Multiferroics, Bad Honnef, Germany
Revisiting the hexagonal manganites; From multiferroic interfaces to cosmic strings

Paul Scherrer Institute Microscopy and Magnetism Meeting, Lungern, Switzerland
Designer tunable interfaces in complex oxides

Orange County Conference on Spintronics, Bangalore, India
Revisiting the hexagonal manganites; From multiferroic interfaces to cosmic strings

Indian Institute of Science, Bangalore, India
Revisiting the hexagonal manganites; From multiferroic interfaces to cosmic strings

Jawaharlal Nehru Center for Advanced Scientific Research, Bangalore, India
Revisiting the hexagonal manganites; From multiferroic interfaces to cosmic strings

Fifth European School on Multiferroics, Ascona, Switzerland
Multiferroics – classification and how to find a room temperature one

2011

Thomas Young Centre, London, England, Colloquium
Recent advances in electronic structure theory; From complex oxides to cosmic strings

International Workshop on Functionality from Heterostructures, Obergurgl, Austria
Revisiting the hexagonal manganites; From multiferroics to cosmic strings

NSF Distinguised Lectureship in Mathematical and Physcial Sciences, VA, USA
Using density functional theory to design new materials: From magnetoelectronics to a theory of everything

Swiss Association of Computational Chemists Meeting, Bern, Switzerland (Plenary)
Using density functional theory to design new materials: From magnetoelectronics to a theory of everything

ETH Zürich Physics Colloquium
Using density functional theory to design new materials: From magnetoelectronics to a theory of everything

Workshop on Multifunctional Oxides and Minerals, Uppsala, Sweden
Multiferroics: Whence, why and whither?

DPG Meeting, Dresden, Germany
Using density functional theory to design new materials: From magnetoelectronics to a theory of everything

Vienna Computational Materials Workshop, Vienna, Austria
Using density functional theory to design new materials: From magnetoelectronics to a theory of everything

EMPA Colloquium, Dubendorf, Switzerland
Using density functional theory to design new materials: From magnetoelectronics to a theory of everything

Paul Scherrer Institute Colloquium, Villigen, Switzerland
Using density functional theory to design new materials: From magnetoelectronics to a theory of everything

2010

Gotham Metro meeting, New York Academy of Sciences
Using density functional theory to design new materials: From magnetoelectronics to a theory of everything

Physics Colloquium, UC San Diego, CA
Using density functional theory to design new materials: From magnetoelectronics to a theory of everything

Physics Colloquium, Gran Sasso National Laboratory, L'Aquila, Italy
Using density functional theory to design new materials: From magnetoelectronics to a theory of everything

Multiscale Modeling of Materials Conference, Freiburg, Germany
Using density functional theory to design new materials: From magnetoelectronics to a theory of everything

Physics Colloquium, UC Merced, CA
Using density functional theory to design new materials: From magnetoelectronics to a theory of everything

Indo-Sweden Workshop, Uppsala, Sweden
What can first-principles calculations contribute to understanding the toroidal moment in bulk periodic solids

Electroceramics XII, Trondheim, Norway (Keynote)
Using density functional theory to design new materials; Magnetoelectronics and the origin of the universe

Materials Department Seminar, ETH, Zurich, Switzerland
Using density functional theory to design new materials; Magnetoelectronics and the origin of the universe

CECAM Workshop on First-Principles Calculations for Magnetoelectrics, Lausanne, Switzerland
What can first-principles calculations contribute to understanding the toroidal moment in bulk periodic solids
Magnetoelectrics; Whence, why and wither?

MPG FKF Seminar, Stuttgart, Germany
Oxide/Oxide interfaces from first principles; Design and understanding

Joint IFW/PKS Colloquium, Dresden, Germany
Using density functional theory to design new materials; Magnetoelectronics and the origin of the universe

Materials Department Seminar, KTH, Stockholm, Sweden
Using density functional theory to design new materials; Magnetoelectronics and the origin of the universe

U. Halle Physics Colloquium, Halle, Germany
Using density functional theory to design new materials; Magnetoelectronics and the origin of the universe

Uppsala University, Complex Systems Seminar, Uppsala, Sweden
Using density functional theory to design new materials. From nanoelectronics to the origin of the universe

APS March meeting, Portland, OR
A theorist's-eye view of multiferroics (McGroddy Prize Talk)

Fundamental Physics of Ferroelectrics, Aspen, CO
The role of first-principles calculations in understanding and designing multiferroics

Kavli Institute of Theoretical Physics, Santa Barbara, CA
Whither (or wither) multiferroics?

2009

MRS Fall meeting, Boston MA
Oxide/Oxide interfaces from First Principles; Design and Understanding

Yale University MRSEC Colloquium, New Haven, CT
Using density functional theory to design new materials; Magnetoelectronics and the origin of the universe

Argonne National Labs., Chicago, IL
Using density functional theory to design new materials; Magnetoelectronics and the origin of the universe

European School on Multiferroics, Groningen, Netherlands
Multiferroics; Recent history, current excitement and future directions

Zernike Insitute, U. Groningen, Netherlands
Using density functional theory to design new materials; Magnetoelectronics and the origin of the universe

Mott Meeting, Santa Barbara, CA
Use of first-principles computations in designing and understanding oxide/oxide interfaces

International Conference on Magnetism, Karlsruhe, Germany (Semi-Plenary)
Novel magnetism at strongly correlated interfaces

Summer School on Materials Modeling from First Principles, Santa Barbara, CA (Keynote)
Using density functional theory to design new materials

MRS Spring meeting, San Francisco, CA
Picozzi-inspired routes to novel magnetoelectrics

Materials Department Colloquium, Iowa State University, Ames, IA
How do we use computational methods to design new materials?

2008

ICMR/ICMS Winter School on Novel Oxide and Carbon Materials, Bangalore, India
Why oxides are interesting and hard to calculate (and why these are related)

MRS Fall meeting, Boston, MA
New routes to electric field control of magnetism

UCSB Physics Graduate Student Seminar, Santa Barbara, CA
How do we use computational methods to design new materials?

Colloquium, CIMAV National Lab., Chihuahua, Mexico
Recent progress in single phase multiferroics

NanoFerronics-2008, Jülich, Germany
Recent progress in single phase multiferroics

Workshop on Ordering Phenomena in Transition Metal Oxides, Augsburg, Germany
Towards a microscopic theory of toroidal moments in periodic crystals

Physics Department Colloquium, Harvey Mudd College, Claremont, CA
How do we use computational methods to design new materials?

Gordon Conference on Correlated Electrons, Biddeford, ME
New routes to electric field control of magnetism

Ehrenfest Colloquium, Lorentz Institute, Leiden, Netherlands
New routes to electric field control of magnetism

European MRS meeting, Strasbourg, France
New routes to electric field control of magnetism

Materials Colloquium, U. Washington, Seattle
New routes to electric field control of magnetism

Physics Colloquium, U. Frankfurt
New routes to electric field control of magnetism

NordinSpin 08, Gimo Herrgard, Sweden
New routes to electric field control of magnetism

APS meeting, New Orleans, LA
Towards a microscopic theory of toroidal moments in bulk, crystalline solids

TMS meeting, New Orleans, LA
Exploiting oxide interfaces to generate new functionalites

Indo-Japan Workshop on New directions in ferroics and multiferroics, Kolkata, India
Progress and prospects in magnetoelectrics and multiferroics

Materials Colloquium, UC Santa Barbara
New routes to electric-field control of magnetism

ISIS Colloquium, UC Irvine
New routes to electric-field control of magnetism

2007

Angstrom Laboratory, Uppsala University, Sweden
Progress and prospects in multiferroics and magnetoelectrics

Jawaharlal Nehru Center for Advanced Scientific Research, India
Multiferroics and magnetoelectrics

CNSI seminar, UCLA
Design of new magnetoelectrics and multiferroics

Zernike Institute Colloquium, U. Groningen, Netherlands
Progress and prospects in multiferroics and magnetoelectrics

The National Academies, Irvine, CA
Grand challenges in oxides research

Northwestern University, Materials Colloquium
Progress and prospects in multiferroics

International Conference on Electroceramics, Arusha, Tanzania (**Plenary**)
Progress and prospects in multiferroics

Pan American Advanced Study Institute on Electronic States and Excitations on Nanostructures, Zacatecas, Mexico
Multiferroics and mangetoelectrics

International Symposium on Correlated Electron Systems, Akihabara, Japan
Alternative mechanisms for the magnetoelectric effect

International Symposium on Integrated Ferroelectrics, Bordeaux, France
First principles calculations for metal-ferroelectric interfaces

University of Bonn, Physics Colloquium
Computational design of contra-indicated multifunctional materials

MRS Spring meeting, San Francisco, CA
Ab initio calculations of complex oxide interfaces

iDFT07, Laguna Beach, CA
Electric fields in DFT calculations; problems and solutions

EMMA MURI Review, Berkeley, CA
The dielectric dead layer in nanoscale capacitors: existence, origin, mitigation and exploitation

Lawrence Berkeley Labs. Seminar
Progress and prospects in multiferroics

Washington University at St. Louis, Physical Chemistry Seminar
Computational design of contra-indicated multifunctional materials

Caltech, Materials Colloquium
Computational design of contra-indicated multifunctional materials

Rensselaer Polytechnic Insitute, Materials Colloquium
Computational design of contra-indicated multifunctional materials

IBM Almaden, Seminar
Progress and prospects in multiferroics: A theorist's perspective

UC Berkeley, Miller Institute Seminar
First-principles design of contra-indicated multifunctional materials

Physics and Chemistry of Semiconductor Interfaces, Salt Lake City, UT
Ab initio calculations for complex oxide interfaces

2006

Materials Research Society Fall Meeting, Boston, MA
Progress in thin film multiferroics
First principles calculations for nanoscale capacitors

California Condensed Matter Theory Meeting, Santa Barbara, CA
Progress and prospects in multiferroics: A theorist's perspective

University of Central Florida, Physics Colloquium
Computational design of contra-indicated multifunctional materials

Florida State University, Materials Colloquium
Computational design of contra-indicated multifunctional materials

Magnetic Nanostructures Gordon Conference, Oxford, UK
Progress and prospects in multiferroics: A theorist's perspective

Solid State Chemistry Gordon Conference, New London, NH
Computational design of contra-indicated multifunctional materials

Workshop on Computational Materials Theory, Bangalore, India
Computational design of contra-indicated multifunctional materials

Summer School on Electronic Structure Methods, Bangalore, India
Introduction to functional materials

International Symposium on Structure-Property Relationships in Solid State Materials, Bordeaux, France
Progress in magnetoelectric multiferroics

UC Santa Barbara, Physical Chemistry Seminar
Computational design of contra-indicated multifunctional materials

University of Toronto, Canada, Condensed Matter Physics Seminar
Why are there so few magnetic ferroelectrics?

Frontiers in Inorganic Materials Chemistry, Santa Barbara, CA
Contra-indicated multifunctional materials: Intelligent design, creation and evolution

Oak Ridge National Labs., Oak Ridge, TN, Center for Nanomaterials Colloquium
Computational design of new multiferroics

Louisiana State University, Baton Rouge, LA, Physics Colloquium
Why are there so few magnetic ferroelectrics?

2005

Stanford University, CA, Materials Colloquium
Why are there so few magnetic ferroelectrics?

Workshop on Oxide Electronics, Cape Cod, MA
Progress in magnetoelectric multiferroics

Ψ_k Conference, Schwabisch Gmünd, Germany
Density functional studies of multiferroics

Fritz-Haber Institute, Berlin, Germany
Computational design of contraindicated multifunctional materials

American Chemical Society National Meeting, Washington, DC
Computational design of contraindicated multifunctional materials

Telluride Workshop on Physics of Novel Oxides, Telluride, CO
Density functional studies of multiferroics

Czech Academy of Sciences, Prague, Czech Republic
Computational design of new multiferroics

National Academy of Sciences Frontiers of Science Symposium, Irvine, CA
Computational design of multifunctional materials

UC Santa Cruz, Chemistry Dept. Inorganic Seminar
Computational design of new multifunctional materials

International Workshop on Prospects in Magnetic Oxides, Fontevraud, France
Density functional studies of multiferroics

APS March meeting, Los Angeles, CA
Density functional studies of multiferroics

Conference on Fundamental Physics of Ferroelectrics, Williambsurg, VA
Recent developments in multiferroics

Materials Research Outreach Symposium, UCSB
Designing new multifunctional materials and violating some laws of physics and chemistry

Science and Engineering Council of Santa Barbara
Chemical design of new multifunctional materials

2004

Los Alamos National Labs.
Can an electric field reverse a spontaneous magnetization?

MRS Fall meeting, Boston, MA
Computational design of multifunctional oxides.
Origin of ferromagnetism in novel spintronic oxides

Workshop on Predictive Capabilities for Strongly-Correlated Systems, Oak Ridge, TN
Comparison between different functionals for transition metal oxides

American Vacuum Society International Symposium, Anaheim, CA
Computational design of multifunctional electronic materials

NSF Workshop on Materials Theory, Arlington, VA
Ab initio design of new multifunctional materials

UC Berkeley, Solid State Physics Seminar
Computational design of new multifunctional materials

UCSB/Oxford Workshop on Advanced Materials, Oxford, UK
Computational design of new multifunctional materials

Inorganic Materials in the UC system, UCSB
A theorist's-eye view of MRL collaborations: How to persuade people to grow your materials

UCLA, Mechanical Engineering Dept. Seminar
Computational design of new multifunctional materials

NSF/ITR Workshop, UIUC, IL
Computational design of new multifunctional materials

ABINIT Electronic Structure Workshop, Paris, France
Organizing software development for computational design of new materials

University of Houston, Chemistry Dept. Colloquium
Computational design of new multifunctional materials

Columbia University, Physics Dept. Seminar
Computational design of new multifunctional materials

Rutgers University, Chemistry Dept. Colloquium
Computational design of new multifunctional materials

NSF/EC Workshop on Computational Materials, San Francisco, CA
Computational design of new spintronic materials

TMS Annual Meeting, Charlotte, NC
Computational design of new spintronic materials

TMS Annual Meeting, NSF-sponsored panel on Future of Metals, Charlotte, NC
Designer approaches to multifunctional metals

UCSB/MPI Workshop on Advanced Materials, Santa Barbara, CA
Computational design of new multifunctional materials

2003

University of Washington, Seattle, Materials Dept. Colloquium
Why are there so few magnetic ferroelectrics?

Fall Meeting of the American Ceramic Society, Oakland, CA
Computational design of new magnetic ferroelectrics

Magnetoelectric Interaction Phenomena in Crystals V, Sudak, Ukraine
Why are there so few magnetic ferroelectrics?

Chemistry of Electronic Materials Gordon Conference, New London, CT
Computational design of multiferroics

University of Lancaster, Physics Dept. Colloquium
New materials for nanospintronics

Cambridge University, Theory of Condensed Matter Seminar
Who I am, where I come from, what I do and where I am going

Accelrys Inc., Cambridge, U.K.
Computational design of new materials

Cambridge University, Materials Dept. Seminar
Why are there so few magnetic ferroelectrics?

TU Dresden, Chemistry Dept. Seminar
Computational design of multiferroics

University of Lancaster, Physics Dept. Seminar
Self-interaction corrections and why we need them (sometimes)

Cambridge University, Physics Dept. Seminar
Why are there so few magnetic ferroelectrics?

Cambridge University, Earth Sciences Seminar
Self-interaction corrections and why we need them (sometimes)

Trinity College, Dublin, Physics Dept. Colloquium
Computational design of new magnetic materials

Condensed Matter and Materials Physics Conference, Belfast, Ireland
A new mechanism for ferroelectricity and a new ferroelectric with an old mechanism

International Symposium on Integrated Ferroelectrics , Colorado Springs, CO
Computational design of new multiferroics

Conference on Fundamental Physics of Ferroelectrics, Williambsurg, VA
A new mechanism for ferroelectricity and a new ferroelectric with an old mechanism

Michigan State University, Physics Dept. Seminar
Computational design of new magnetic materials

2002

University of Michigan, Ann Arbor, Materials Dept. Colloquium
Computational design of new magnetic materials

Solid State Chemistry Gordon Conference, New London, NH
Computational design of new spintronic materials

UC San Diego, Physics Dept. Seminar
New materials for nanospintronics

CNRS Workshop on Advanced Materials, Paris, France
New materials for nanospintronics

MRS Spring meeting, San Francisco, CA
Computational design of new multiferroic perovskites

APS March meeting, Indianapolis, IN
Computational design of new multiferroic materials

National Science Foundation IGERT P.I. Workshop, Washington, DC
Interdisciplinary graduate education at UCSB: Mentoring and Diversity

Hughes Research Labs., Malibu, CA
Pushing the limits of electronic structure theory; Can we design new spintronic materials?

2001

California State University, Northridge
Why are there so few magnetic ferroelectrics?

EPFL-ETHZ-UCSB-WIS Workshop on Advanced Materials, Cret-Bérard, Switzerland
Why are there so few magnetic ferroelectrics?

EPFL, Switzerland
Why are there any magnetic ferroelectrics?

University of Fribourg, Switzerland
First principles prediction of diferroism in $BiCrO_3$

CNRS, Grenoble, France
Why are there so few magnetic ferroelectrics?

Joint European Magnetism Symposium, Grenoble, France
Why are there any magnetic ferroelectrics?

Los Alamos National Lab.
Why are there so few magnetic ferroelectrics?

Spintronics 2001, Georgetown
Pushing the limits of electronic structure theory; can we design new spintronic materials?

ICTP/UCSB/TWAS workshop, Trieste, Italy
Pushing the limits of electronic structure theory; Can we design new spintronic materials?

Corning Incorporated
Spintronics Materials Research at UCSB

ACS Spring meeting, San Diego, CA
Design of new multiferroic materials using computational solid state chemistry

San Diego State University, Physics Dept. Colloquium
Why are there so few magnetic ferroelectrics?

2000

Pakistan Physical Society's 8th National Symposium on Frontiers in Physics, Lahore
First principles study of two magnetic ferroelectrics

IIT Delhi, Dept. of Chemistry Seminar
Why are there so few magnetic ferroelectrics?

Jawaharlal Nehru Center for Advanced Scientific Research
Why are there so few magnetic ferroelectrics?

Jawaharlal Nehru Center for Advanced Scientific Research
New materials for Nanospintronics

Indian Institute of Science, Solid State Chemistry Unit
Why are there so few magnetic ferroelectrics?

Materials Research Outreach Symposium, UCSB
Why are there so few magnetic ferroelectrics?

Aspen Center for Physics
Why are there so few magnetic ferroelectrics?

1999

QUEST Seminar, UCSB
Multiferroism and magnetoresistance in manganites - a new class of materials for magnetic data storage?

UCLA, Dept. of Chemistry Seminar
Multiferroism and magnetoresistance in manganites - a new class of materials for magnetic data storage?

UCSB-MRL/IMN-CNRS Workshop, Nantes, France
Multiferroism and magnetoresistance in manganites - a new class of materials for magnetic data storage?

UCSB-MRL/CSIRO/KAIST Workshop on Advanced Materials
Multiferroism and magnetoresistance in manganites - a new class of materials for magnetic data storage?

1998

UC Berkeley, Materials Dept. Colloquium
Multiferroism and magnetoresistance in manganites - new materials for magnetic data storage?

UC San Diego, Solid State Physics Seminar
First principles investigation of ferromagnetic ferroelectric $BiMnO_3$ - a new perspective on the perovskite manganites

UC Irvine, Solid State Physics Seminar
First principles investigation of ferromagnetic ferroelectric $BiMnO_3$ - a new perspective on the perovskite manganites

1997

Cambridge University, England, Physics Dept. Seminar
First principles study of ferromagnetic ferroelectrics

Fachbereich Physikalische Chemie der Phillips-Universität Marburg, Germany
First-principles design of new materials for magnetic data storage

NIST Center for Theoretical and Computational Materials Science
Bismuth manganite - the ferromagnetic ferroelectric perovskite

1996

University of California at Santa Barbara, Materials Department
Calculating the electronic properties of semiconductor nanostructures

1995

AT&T Bell Laboratories
Calculating the electronic properties of semiconductor nanostructures

College of William & Mary, Applied Sciences Dept. Seminar
Calculating the electronic properties of semiconductor nanostructures

California Institute of Technology, Applied Physics Seminar
Calculating the electronic properties of nanometer-sized semiconductor structures