CURRICULUM VITAE

VALERI N. KOTOV

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Education

1996 — Ph.D. in Physics, Clarkson University, Potsdam, NY, USA.
Topic: Disordered Interacting Particle Systems, Advisor: G. Forgacs.
M.S. in Physics (1993)

1990 — M.S. in Theoretical Physics, Sofia University, Sofia, Bulgaria.
(Nuclear and Elementary Particle Physics Specialization)

Employment and Professional Experience

2015 – — Associate Professor, Department of Physics,
University of Vermont, Burlington, VT.

2009–2015 — Assistant Professor, Department of Physics,
University of Vermont, Burlington, VT.

2005–2009 — Research Assistant Professor, Department of Physics &
Department of Electrical and Computer Engineering
Boston University, Boston, MA.
Research Areas: Quantum Magnetism and Graphene.

2001–2005 — Senior Assistant (with research and teaching duties), Institute of
Theoretical Physics, Swiss Federal Institute of Technology (EPFL) &
University of Lausanne, Lausanne, Switzerland.
Teaching and Research in Condensed Matter Theory
(Strongly Correlated Electron Systems).

1998–2001 — Research Associate, Department of Physics, University of Florida,
Gainesville, FL.
Research in Strongly Correlated Systems and Magnetic Materials.

1996–1998 — Research Associate, School of Physics, University of New South Wales,
Sydney, Australia.
Research in Quantum Spin Systems and Frustrated Magnetism.

1992–1995 — Graduate Teaching Assistant, Physics Department, Clarkson University.
Undergraduate Physics Courses: Problem Sessions, Some Lectures.

Awards and Fellowships

1995	Outstanding Graduate Student Award, Clarkson University.
1990–91	Research Fellowship, Department of Theoretical Physics, Sofia University.
1991	Outstanding Student Award of the Bulgarian Ministry of Higher Education.

Scientific Background

- Condensed Matter Theory and Quantum Many-Body Theory

Main Areas of Research

- The Physics of Graphene: Electron Correlations, Impurity Effects.
- Quantum Magnetism: Dimerized Spin Systems, Frustrated Magnets, Novel Quantum Phases, Quantum Phase Transitions.
- Strongly Correlated Electronic Materials.

Major Research Accomplishments

- Theory of van der Waals Interactions between Strained Graphene Layers.
- Theory of Electron-Electron Interactions in Strained Graphene.
- Theory of Magnetic Moment Formation in Isotropic and Strained Graphene.
- Theory of Nonlinear Screening of Coulomb Impurities and Interaction Effects in the Polarization of Graphene.
- Graphene in Strong External Fields: Prediction of Coulomb Impurity Effects in "Massive" Graphene, Charging of the Vacuum and Nanoscale Charge Distribution.
- Theory of Incommensurate Magnetic Correlations and Transport in Underdoped High-T_c Cuprate Superconductors.
- Theory of Exotic Weak Antiferromagnetic Order in Strongly Frustrated Spin Systems, such as Pyrochlore Magnets.
- Theory of Collective Excitations and Many-Body Effects in Low-Dimensional Quantum Antiferromagnets with Dimerization and Frustration.
- Accurate Description of Quantum Disordered (Dimerized) Phases and Quantum Phase Transitions in Antiferromagnets.
- Theoretical Modeling of Strongly Correlated Electronic Materials: Novel Molecular Magnets, Spin Dimer and Spin-Peierls Compounds, and Superconducting Oxides.

Teaching at the University of Vermont (partial list)

- "Electricity and Magnetism," PHYS 213 (Fall 2009, Fall 2010, Fall 2011)
- "Mechanics," PHYS 211 (Spring 2010, Spring 2011)
- "Solid State Physics," PHYS 341 (Spring 2012)
- "Fundamentals of Physics I," PHYS 051 (Fall 2012/13/14)

Service at the University of Vermont

- College of Arts and Sciences (CAS) Curriculum Committee (Fall 2012)
- CAS RANSS (Research Awards in the Natural and Social Sciences) Committee (Spring 2013)
- Colloquium committee/Dept. of Physics (2010-2013)
- Graduate committee/Dept. of Physics and Materials Science Program (2010-2012)
- Co-Chair: Physics Graduate Committee (2012-current)
- Organizer, Condensed Matter and Materials Physics Seminar/Dept. of Physics (2010, 2011)
- Faculty search committee/Dept. of Physics (2010/2013)
- Thesis committee member: L. Zhou, S. Wo, and Y. Zhang (Ph.D. Materials Science, 2010-12)
  Thesis committee chair: Evan Malina (M.S. Mechanical Engineering, 2011)

Supervision of students and research scholars at UVM

Current graduate students: Noah Wilson (Physics, 2014–), Nathan Nichols (Materials Science, 2014–)
Postdoctoral research associate: Dr. Anand Sharma (2010–2014)
M.S. in Physics: Peter Harnish (2013–14)
Honors thesis student: Christopher Libby (2010–2011)
Ph.D. Materials Science: Kasey Hulvey (Spring 2011–)
Undergraduate research projects (work/study, readings and research):
Eli Kinigstein (Spring 2010, Spring 2011), Johannes Haslmayr (Spring 2010).

Teaching Experience (prior to UVM)

- "Advanced Solid State Physics" Course, covering Quantum Many-Body Physics
  University of Lausanne & Swiss Federal Institute of Technology (Lausanne)
  Academic Years 2002-04 (Assistant of Prof. F. Mila)
- Invited Lecturer, Graduate Series "Field Theoretical Methods in Condensed Matter Physics" on the Topic "Low-Dimensional Quantum Spin Systems" (6 Lectures),
  The University of New South Wales, Sydney, Fall 1997.
- Teaching Assistant for all Major Undergraduate Physics Courses at
  the Physics Department, Clarkson University, Potsdam, NY, Academic Years 1992-95.
  TA for Math. Physics Course, Dept. of Physics, Sofia University, Sofia (Bulgaria), 1990-91

- Students Supervised:
  (1.)Diploma thesis work (after 4-th year) of A. Lüscher, 2003/defended 2003.
  Swiss Federal Institute of Technology, Lausanne (co-supervised with Prof. F. Mila)
  (2.)Ph.D. thesis work of P. Shevchenko, 1997-98/defended 1999.
  The University of New South Wales, Sydney (co-supervised with Prof. O. Sushkov)
  (3.)Ph.D. thesis work of D.X. Yao, 2006-07/defended 2007.
  Boston University, Boston, MA (co-supervised with Prof. D. Campbell)

Professional Activities and Service

- Member, American Physical Society, European Physical Society.

- Visiting scholar at the Department of Physics, Yale University (Oct.–Nov. 2000).

- Gordon Godfrey visiting scholar, University of New South Wales, Australia (May-June 2011).

- Visiting member, Kavli Institute for Theoretical Physics Program on the Physics of Graphene, University of California, Santa Barbara, January 2012.

- Organizer, Condensed Matter Theory Journal Club, University of Florida, Spring/Fall 2000.
  Coordinator, Graphene Group Meeting, Boston University, Spring/Fall 2007.

- Chair, Tutorial Session on Graphene: APS March Meeting 2013, Baltimore.

- Organizer and Chair, Tutorial Session on Graphene: APS March Meeting 2014, Denver.

- Chair, Focus Session Graphene: Magnetic Properties, APS March Meeting 2010, Portland.

- Referee for Conference Proceedings: Highly Frustrated Magnetism 2003 (Grenoble), International Conference on Strongly Correlated Electron Systems, SCES2001 (Ann Arbor), SCES2007 (Houston), International Conference on Magnetism'97 (Cairns).

- Referee for Nature Physics, the European Physical Journal B, Europhysics Letters, Physical Review Letters, and Physical Review B. Referee for NSF and DOE grant proposals.

- Member of the International Advisory Board of the journal Advanced Electronic Materials.

Invited Talks

(36.) *"Correlations in Graphene-based Materials,"*
Physics Colloquium, California State University, Long Beach, June 2017.

(35.) *"van der Waals Interactions and Wetting of Graphene/2D Materials,"*
Condensed Matter Physics Seminar, University of California, Irvine, June 2017.

(34.) *"Magnetic and Valley Order in Graphene on Boron Nitride,"*
Monash Centre for Atomically Thin Materials,
Monash University, Melbourne (Australia), May 2016.

(33.) *"Magnetic and Valley Order in Graphene on Boron Nitride,"*
Gordon Godfrey Theoretical Physics Seminar,
University of New South Wales, Sydney (Australia), May 2016.

(32.) *"Ultra Thin Van der Waals Materials,"*
Advanced Next Generation Energy Leadership (ANGEL) Symposium, U. Vermont, Oct 2016.

(31.) *"Valley Order and Loop Currents in Graphene on Boron Nitride,"*
Condensed Matter Physics Seminar, University of Missouri, Columbia, May 2015.

(30.) *"Electron-Electron Interactions in Graphene,"*
Tutorial Session on Graphene, March Meeting of the American Physical Society,
Baltimore, MD, March 17, 2013.

(29.) *"Anisotropic Dirac Liquids and Solids: Strained Graphene and Related Systems,"*
Condensed Matter Physics Seminar, University of Oklahoma, Norman, March 2013.

(28.) *"Anisotropic Dirac Liquids and Solids: Strained Graphene and Related Systems,"*
Theoretical Condensed Matter Physics Principal Investigators Meeting,
U.S. Department of Energy, Office of Basic Energy Sciences, Rockville, MD, August 2012.

(27.) *"Correlations in Graphene,"* Condensed Matter Physics Seminar, Boston University, April 2012.

(26.) *"Correlations in Graphene,"*
Condensed Matter and Surface Sciences Colloquium, Ohio University, Athens, March 2012.

(25.) *"Deconfined Spinons at a Quantum Critical Point,"*
Condensed Matter Physics Seminar, University of Oklahoma, Norman, October 2011.

(24.) *"The Spinon Gas Model and its Numerical Tests: Deconfined Spinons at 2D Quantum Phase Transition,"* Workshop on Synergies between Field Theory and Exact Computational Methods in Strongly Correlated Quantum Matter,
International Centre for Theoretical Physics (ICTP), Trieste (Italy), July 2011.

(23.) *"Deconfined Spinons at 2D Quantum Phase Transition,"*
Gordon Godfrey Theoretical Physics Seminar,
University of New South Wales, Sydney (Australia), June 2011.

(22.) *"Exploring the New Physics of Graphene,"*
Physics Colloquium, University of Missouri, Columbia, October 2010.

(21.) *"Correlations in Graphene,"*
Physical Sciences Seminar, IBM T.J. Watson Research Center, Yorktown Heights, May 2010.

(20.) *"Exploring the New Physics of Graphene,"*
Physics Colloquium, University of New South Wales, Sydney (Australia), May 2010.

(19.) *"Graphene in a Strong Coulomb Field,"*
Condensed Matter Theory Kids Seminar, Harvard University, April 2009.

(18.) *"Exploring the New Physics of Graphene,"*
Physics Colloquium, University of Vermont, Burlington, February 2009.

(17.) *"Exploring the New Physics of Graphene,"*
Physics Colloquium, University of North Dakota, Grand Forks, February 2009.

(16.) *"Exploring the New Physics of Graphene,"*
Physics Colloquium, University of Kentucky, Lexington, December 2008.

(15.) *"Quantum Phase Transitions beyond the Dilute Bose Gas Limit,"*
Condensed Matter Theory Seminar, Boston University, February 2007.

(14.) *"Incommensurate Magnetism in Underdoped Cuprates,"*
Colloquium, National Pulsed Magnetic Field Laboratory, Toulouse (France), December 2004.

(13.) *"Exotic Order in Quantum Antiferromagnets,"*
Theoretical Physics Seminar, LPTL, Université Pierre et Marie Curie, Paris (France), May 2004.

(12.) *"Exotic Order in Quantum Antiferromagnets,"*
Theoretical Physics Seminar, Université Paul Sabatier, Toulouse (France), March 2004.

(11.) *"Dimerized Phases and Quantum Phase Transitions in Antiferromagnets,"*
Colloquium, Institut Laue-Langevin (ILL), Grenoble (France), November 2002.

(10.) *"Dimerized Phases in Quantum Antiferromagnets,"*
Condensed Matter Seminar, Swiss Federal Institute of Technology (ETHZ),
Zurich (Switzerland), November 2002.

(9.) *"Universal Quantum Critical Scaling in Quantum Spin Ladder Systems,"*
Condensed Matter Theory Seminar, University of Lausanne, Lausanne (Switzerland), Oct. 2001.

(8.) *"The Novel Quasi-One-Dimensional Spin Ladder Material* $(C_5H_{12}N_2)_2CuBr_4$*:*
Behavior in High Magnetic Field and Universal Quantum Critical Scaling,"
Condensed Matter Seminar, University of Florida, Gainesville, December 2000.

(7.) *"Low-Energy Excitations and Spontaneous Dimer Order in the 2D* $J_1 - J_2$ *Model,"*
Kavli Institute for Theoretical Physics Conference on Quantum Magnetism,
University of California, Santa Barbara, August 1999.

(6.) *"Low-Energy Excitations and Dimer Order in the Two-Dimensional* $J_1 - J_2$ *Model,"*
Condensed Matter Theory Seminar, Yale University, New Haven, April 1999.

(5.) *"Dimer Phases and Quantum Transitions in Low-Dimensional Antiferromagnets,"*
Condensed Matter Seminar, University of Florida, Gainesville, February 1999.

(4.) *"Spin Liquids and Quantum Phase Transitions in Low-Dimensional Antiferromagnets,"*
Theoretical Physics Seminar, The Australian National University, Canberra, May 1998.

(3.) *"Low-Dimensional Quantum Spin Systems,"*
Invited Series of Six Lectures for Postgraduate Students.
The University of New South Wales, Sydney (Australia), Fall 1997.

(2.) *"Non-Perturbative Methods in Disordered Interacting Systems,"*
Theoretical Physics Seminar, The University of New South Wales, Sydney, October 1996.

(1.) *"Instanton Approach to Interacting Random Systems,"*
Theoretical Division (T-11) Seminar, Los Alamos National Laboratory, Los Alamos, Aug. 1995.

Conference Presentations and other Talks

(contributed, unless stated otherwise; first author is the presenter)

(54.) *"Interactions and Renormalization of Semi-Dirac Fermions,"*
V.N. Kotov, B. Uchoa, and O. Sushkov;
"Critical films on graphene substrates,"
R. Beneski, A. Del Maestro, J. Vanegas, and V.N. Kotov;
March Meeting of the American Physical Society, Los Angeles, CA, 2018.

(53.) *"Discovery of Gravitational Waves,"*
V.N. Kotov, Public talk on the occasion of 2017 Nobel Prizes,
College of Arts and Sciences, University of Vermont, November 2017.

(52.) *"Manipulating the Electronic Structure and Interactions in 2D Atomic Crystals,"*
V.N. Kotov, New England Materials Workshop, University of New Hampshire, June 2017.

(51.) *"Novel van der Waals Phenomena near 2D Atomic Crystals,"*
V.N. Kotov, A. Del Maestro, and D. Clougherty,
NASA Fundamental Physics Workshop, Santa Barbara, CA, June 2017.

(50.) *"Anomalous Magnetic Response of Two-Dimensional Materials,"*
V.N. Kotov, S. Sengupta, M. Furis, and O. Sushkov;
"Critical wetting instabilities of light gases on graphene"
A. Del Maestro, S. Sengupta, N. Nichols, and V.N. Kotov;
"Superfluid ^{4}He phases on strained graphene,"
N. Nichols, V.N. Kotov, and A. Del Maestro;
March Meeting of the American Physical Society, New Orleans, LA, 2017.

(49.) *"Emergence of Spin-Valley Order in Graphene on Hexagonal Boron Nitride,"*
University of Vermont, Physics Colloquium, Sept. 2016

(48.) *"SU(4) quantum spin liquids in critical Coulomb impurity lattices,"*
X. Dou, V.N. Kotov, and B. Uchoa;
"Helium adsorption potential near mechanically deformed graphene,"
N. Nichols, A. Del Maestro, and V.N. Kotov;
"Exotic Charge Polarization near Dirac Cone Merging Transition in Graphene-based Systems,"
N. Wilson, O. Myers, T. Lakoba, and V.N. Kotov;
"Novel Infrared Dynamics of Cold Atoms on Hot Graphene,"
S. Sengupta, V.N. Kotov, and D.P. Clougherty,
March Meeting of the American Physical Society, Baltimore, MD, 2016.

(47.) *"Dispersion Forces of Adatoms on Deformed Graphene,"*
V.N. Kotov, March Meeting of the American Physical Society, San Antonio, TX, 2015.

(46.) *"Valley order and loop currents in graphene on hexagonal boron nitride,"*
B. Uchoa, V.N. Kotov, and M. Kindermann,
March Meeting of the American Physical Society, San Antonio, TX, 2015.

(45.) *"Interaction phenomena in graphene,"*
V.N. Kotov, Theory group seminar, University of New South Wales, Sydney (Australia), Jan. 2015.

(44.) *"Interaction phenomena at topological transitions in strongly anisotropic Dirac materials,"*
V.N. Kotov, March Meeting of the American Physical Society, Denver, CO, 2014.

(43.) *"Van der Waals forces and electron-electron interactions in two strained graphene layers,"*
A. Sharma, P. Harnish, A. Sylvester, and V.N. Kotov,
March Meeting of the American Physical Society, Denver, CO, 2014.

(42.) *"Excitonic Pairing between Strained Graphene Layers,"*
P. Harnish, A. Sharma, and V.N. Kotov,
March Meeting of the American Physical Society, Denver, CO, 2014.

(41.) *"Polarization Waves around Coulomb Impurities in Strained Graphene,"*
V.N. Kotov, A. Sharma, and A.H. Castro Neto,
March Meeting of the American Physical Society, Baltimore, MD, 2013.

(40.) *"Spontaneous Gap Formation in Uniaxially Strained Graphene,"*
A. Sharma, V.N. Kotov, and A.H. Castro Neto,
March Meeting of the American Physical Society, Baltimore, MD, 2013.

(39.) *"Graphene: The Thinnest Material in Nature,"*
V.N. Kotov, Physics Colloquium, University of Vermont, Burlington, September 2012.

(38.) *"Spontaneous gap formation in uniaxially strained Graphene,"*
A. Sharma, V.N. Kotov, and A.H. Castro Neto,
Gordon Research Conference on Correlated Electron Systems (Correlations and Topology
in Electron Systems), Mount Holyoke, MA, June 2012.

(37.) *"Formation of Localized Magnetic States on Adatoms in Uniaxially Strained Graphene,"*
A. Sharma and V.N. Kotov,
March Meeting of the American Physical Society, Boston, MA, 2012.

(36.) *"Deconfined Spinons at a Quantum Critical Point,"*
V.N. Kotov, Condensed Matter and Materials Physics Seminar, Univ. of Vermont, Sept. 2011

(35.) *"Electron-electron interactions and anisotropic Dirac fermions in graphene,"*
A. Sharma, V.N. Kotov, and A.H. Castro Neto,
19-th International Conference on Electronic Properties
of Two-Dimensional Systems (EP2DS19), Tallahassee, FL, July 2011.

(34.) *"Thermodynamics of deconfined bosonic spinons in two dimensions,"*
V.N. Kotov, A.W. Sandvik, and O.P. Sushkov,
March Meeting of the American Physical Society, Dallas, TX, 2011.

(33.) *"Electron-electron interactions in strained graphene,"*
A. Sharma and V.N. Kotov, March Meeting of the American Physical Society, Dallas, TX, 2011.

(32.) *"Spin and Valley Polarization on deep Coulomb States in Graphene,"*
V.N. Kotov, V.M. Pereira, B. Uchoa, and A.H. Castro Neto,

March Meeting of the American Physical Society, Portland, OR, 2010.

(31.) *"Spin and Valley Polarization on deep Coulomb States in Graphene,"*
V.N. Kotov, V.M. Pereira, B. Uchoa, and A.H. Castro Neto,
Graphene Week 2010, University of Maryland, April 2010.

(30.) *"Polarization and Many-Body Phenomena in Massive Graphene,"*
V.N. Kotov, V.M. Pereira, B. Uchoa, and A.H. Castro Neto,
March Meeting of the American Physical Society, Pittsburgh, PA, 2009.

(29.) *"Polarization and Many-Body Phenomena in Massive Graphene,"*
V.N. Kotov, V.M. Pereira, B. Uchoa, and A.H. Castro Neto,
Boston Area CarbOn Nanoscience (BACON) Day Conference, Boston University, June 2009.

(28.) *"Coulomb Impurity Screening in Graphene,"* V.N. Kotov,
March Meeting of the American Physical Society, New Orleans, LA, 2008.

(27.)(invited) *"Adatoms in Graphene,"*
A.H. Castro Neto, V.N. Kotov, J. Nilsson, V.M. Pereira, N.M.R. Peres, and B. Uchoa,
Graphene Week 2008, International Centre for Theoretical Physics, Trieste (Italy), August 2008.

(26.) *"Correlation Energy Effects in Graphene,"* V.N. Kotov and A.H. Castro Neto,
March Meeting of the American Physical Society, Denver, CO, 2007.

(25.) *"Quantum Phase Transition of Heisenberg Antiferromagnet with Four-Spin Ring Exchange,"*
D.-X. Yao, V.N. Kotov, A.H. Castro Neto, and D.K. Campbell
March Meeting of the American Physical Society, Denver, CO, 2007.

(24.) *"Are Stripes Generically Important for High-T_c cuprates?,"*
V.N. Kotov, A.H. Castro Neto, and O.P. Sushkov,
Gordon Research Conference on Correlated Electron Systems, Mount Holyoke, MA, June 2006.

(23.) *"Transport Anisotropy due to Spiral Spin Order in Underdoped Cuprates,"*
V.N. Kotov and O.P. Sushkov, APS March Meeting, Baltimore, MD, 2006.

(22.) *"Spiral Spin Order and Transport Anisotropies in Underdoped Cuprates,"* V.N. Kotov,
International Workshop on Effective Models for Low-Dimensional Strongly Correlated
Systems, Peyresq (France), September 2005.

(21.) *"Stability of the Spiral Phase and Superconductivity in the Two-Dimensional t-J model,"*
O.P. Sushkov and V.N. Kotov, International Conference on Spectroscopies
in Novel Superconductors (SNS04), Sitges (Spain), July 2004.

(20.) *"Quantum Phases in Frustrated Coupled-Tetrahedra Systems,"*
V.N. Kotov, F. Mila, and M.E. Zhitomirsky, Workshop on Materials with Novel Electronic Properties,
Les Diablerets (Switzerland), September 2003.

(19.) *"Quantum Singlet Dynamics in Frustrated Coupled-Tetrahedra Systems,"*
V.N. Kotov, M. Elhajal, M.E. Zhitomirsky, and F. Mila,
International Conference on Highly Frustrated Magnetism (HFM2003),
Institut Laue-Langevin, Grenoble (France), August 2003.

(18.) *"Quantum Singlet Dynamics in Frustrated Coupled-Tetrahedra Systems,"* V.N. Kotov,
Meeting on Oxides with Remarkable Properties, Caen-Colleville (France), May 2003.

(17.) *"Spin-Peierls Transition in NaV_2O_5 in High Magnetic Fields: Charge Fluctuation Effects,"*
V.N. Kotov, S. Bompadre, A. Hebard, D. Hall, G. Maris, J. Baas, and T.T.M. Palstra,
Condensed Matter Physics Conference (JMC8), Marseille-Luminy (France), August 2002.

(16.) *"Competition between Valence Bond Liquid and Solid phases in the Kagome Antiferromagnet,"* V.N. Kotov and F. Mila,
19-th General Conference of the European Physical Society (Condensed Matter Division),
Brighton (UK), April 2002.

(15.) *"Spontaneously Dimerized Quantum Phases in Antiferromagnets,"*
V.N. Kotov, W.H. Zheng, J. Oitmaa, and O.P. Sushkov,
Swiss Physical Society Annual Meeting, EPFL, Lausanne (Switzerland), March 2002.

(14.) *"The Kondo Lattice Model from strong-coupling viewpoint,"* V. N. Kotov and P.J. Hirschfeld,
International Conference on Strongly Correlated Electron Systems (SCES2001),
Ann Arbor, MI, August 2001.

(13.) *"The Kondo Lattice Model from Local Viewpoint,"* V.N. Kotov and P.J. Hirschfeld,
March Meeting of the American Physical Society, Seattle, WA, 2001.

(12.) *"The Magnetic Spin Ladder $(C_5H_{12}N_2)_2CuBr_4$: High Field Magnetization and Scaling Near Quantum Criticality,"*
V.N. Kotov, B.C. Watson, M.W. Meisel, D.W. Hall, G.E. Granroth, M.T. Montfrooij, S.E. Nagler,
D.A. Jensen, R. Backov, M.A. Petruska, G.E. Fanucci, and D.R. Talham,
Gordon Conference on Correlated Electron Systems, Plymouth, NH, June 2000.

(11.) *"Critical Dynamics of Singlet Excitations in Frustrated Quantum Spin Systems,"*
V.N. Kotov, M.E. Zhitomirsky, and O.P. Sushkov,
International Workshop on Latest Developments in Low-Density and
Low-Dimensional Electron Systems (LD3), University of Florida, Gainesville, March 2000.

(10.) *"Magnetic Bound States in the Spin Dimer Compound $SrCu_2(BO_3)_2$,"*
V.N. Kotov and S. Hershfield,
March Meeting of the American Physical Society, Minneapolis, MN, 2000.

(9.) *"Spin-Peierls transition in NaV_2O_5 in high magnetic fields,"*
A. Hebard, S. Bompadre, V.N. Kotov, D. Hall *et al.*,
March Meeting of the American Physical Society, Minneapolis, MN, 2000.

(8.) *"Zero-bias anomalies in magnetic hexaborides,"*
S. Hershfield and V.N. Kotov,
March Meeting of the American Physical Society, Minneapolis, MN, 2000.

(7.) *"Structure of the Spin-Liquid Phase of the $J_1 - J_2$ Model,"*
V.N. Kotov, W.H. Zheng, J. Oitmaa, and O.P. Sushkov,
March Meeting of the American Physical Society, Atlanta, GA, 1999.

(6.) *"Novel Approach to Description of Spin-Liquid States in Low-Dimensional Quantum Antiferromagnets,"* V.N. Kotov, W.H. Zheng, J. Oitmaa, and O.P. Sushkov, March Meeting of the American Physical Society, Los Angeles, CA, 1998.

(5.) *"Renormalization Group Approach to 1D Electron-Phonon Models,"* V.N. Kotov, Statistical Mechanics Meeting'97, The University of New South Wales, Sydney (Australia), November 1997.

(4.) *"Local Impurities in Two-Dimensional Quantum Antiferromagnets,"* V.N. Kotov, J. Oitmaa, and O.P. Sushkov, International Conference on Magnetism, Cairns (Australia), July 1997.

(3.) *"Quantum Spin Ladders with Dimerization,"* V.N. Kotov and J. Oitmaa, Statistical Mechanics Meeting'96, University of Melbourne, Melbourne (Australia) 1996.

(2.) *"Density of States of a Model Interacting Disordered System,"* V.N. Kotov and G. Forgacs, 72-nd Statistical Mechanics Meeting, Rutgers University, Piscataway, NJ, 1995

(1.) *"Density of States in Interacting Disordered Systems: an Instanton Approach,"* V.N. Kotov and G. Forgacs, Statistical Physics at the 45-th Parallel, Syracuse University, Syracuse, NY, 1995.