

# ALEXEY A PETROV

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## PROFESSIONAL EXPERIENCE

- 2001 - present Assistant (2001), Associate (2006), Full (2011) Professor  
**Wayne State University**, Detroit, Michigan
- 2002 - present Associate Member, The Leinweber Center for Theoretical Physics  
**University of Michigan**, Ann Arbor, Michigan
- 2000 - 2001 Postdoctoral Research Associate  
**Cornell University**, Ithaca, New York
- 1997 - 2000 Postdoctoral Research Fellow  
**Johns Hopkins University**, Baltimore, Maryland

## EDUCATION

- 1995-1997 University of Massachusetts, Amherst (Ph.D. in Physics)
- 1993-1994 University of Massachusetts, Amherst (M.S. in Physics)
- 1988-1994 St. Petersburg (Poly)Technical University, Russia  
Diploma (Nuclear Physics), *Summa Cum Laude*

## ACADEMIC AND SCIENTIFIC HONORS

### National or International

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|--|---|
| Fellow                                   | 2015, American Physical Society         |
| Comenius Professorship                   | 2015-17, Siegen University (Germany)    |
| Intensity Frontier Fellowship            | 2014-15, Fermi National Accelerator Lab |
| FNAL Visiting Scholar Award              | 2014, Universities Research Association |
| Certificate of Reviewing Excellency      | 2012, Physics Letters (Elsevier)        |
| NSF CAREER Award                         | 2005, U.S. National Science Foundation  |
| Frontier Science Golden Conference Award | 2002, INFN Frascati (Italy)             |

### University

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|--|--|
| Elected President of Academy of Scholars     | 2020, Wayne State University           |
| C.H. Gershenson Distinguished Faculty Fellow | 2018-20, Wayne State University        |
| Elected to Academy of Scholars               | 2018, Wayne State University           |
| Richard J Barber Faculty Award               | 2016 & 2010, WSU Department of Physics |
| Board of Governors Faculty Recognition Award | 2010, Wayne State University           |

Career Development Chair Award	2008-09, Wayne State University
Campus Life Leadership Award	2007, Wayne State University
Outstanding Junior Faculty Award	2006, WSU Academy of Scholars
Excellence in Teaching Award	2004, WSU College of Science
University Research Grant Award	2001, Wayne State University
University Council/Lenin Fellowship	1990-93, St. Petersburg Tech. University

## RESEARCH INTERESTS

THEORETICAL PARTICLE PHYSICS: effective field theories, physics of flavor, heavy quark physics, CP-violation, neutrino and lepton physics, phenomenology of dark sector, Higgs physics, glueballs and exotic states in QCD

THEORETICAL ASTROPHYSICS: dark matter, primordial black holes

COMPUTATIONAL SCIENCES: neural networks and nonperturbative effects in QCD, QFT on quantum computers, distance learning

## PROFESSIONAL TRAINING

2019-20	WSU Academic Leadership Academy [leadership skills academy for future academic leaders]
1996	SLAC Summer Institute
1995	Theoretical Advanced Study Institute (TASI), U of Colorado

## RECENT EDITORIAL ACTIVITIES

Editor	<i>“Advances in High Energy Physics”</i> (ISSN: 1687-7357)
Editor	<i>“Central European Journal of Physics”</i> (ISSN 1644-3608) (2010-13)

## CONFERENCE ORGANIZATION

Organizing Committee	<i>20th Conference on Flavor Physics and CP Violation</i> (FPCP 2022), Oxford, Mississippi, USA
Program Advisory Committee	<i>11th International Workshop on the CKM Unitarity Triangle</i> (CKM 2020), Melbourne, Australia
Internat. Advisory Committee	<i>10th International Workshop on Charm Physics</i> (CHARM 2020), Mexico City, Mexico
Internat. Advisory Committee	<i>9th International Workshop on Charm Physics</i> (CHARM 2018), Novosibirsk, Russia

Internat. Advisory Committee	<i>8th International Workshop on Charm Physics</i> (CHARM 2016), Bologna, Italy
Local Organizing Committee	<i>The 2016 International Cosmology Conference</i> (COSMO 2016), Ann Arbor, MI
Chair, Organizing Committee	<i>7th International Workshop on Charm Physics</i> (CHARM 2015), Detroit, MI
Internat. Advisory Committee	<i>6th International Workshop on Charm Physics</i> (CHARM 2013), Manchester, UK
Program Committee	<i>2011 Meeting of the Division of Particles and Fields of APS</i> (DPF-2011), Providence, RI
Chair, Organizing Committee	<i>2010 Amherst Phenomenology Workshop</i> Amherst, MA 2010
Chair, Organizing Committee	<i>2009 Meeting of the Division of Particles and Fields of APS</i> (DPF-2009), Detroit, MI
Organizing Committee	<i>1st Meeting of the APS Topical Group on Hadronic Physics</i> Fermilab, Batavia, Illinois, 2004
Convener	<i>Beyond the Standard Model / Super-B factory</i> topical group Quarkonium Working Group, 2007-present
Convener	<i>“D, K, and tau” parallel session.</i> 2006 Meeting of the Division of Particles and Fields, American Physical Society, Honolulu, Hawaii, 2006
Convener	<i>Charm inputs to CKM physics</i> working group Workshop on the CKM Unitarity Triangle, Durham, UK, 2003
Convener	<i>Charm quark parallel session</i> 2000 Meeting of the Division of Particles and Fields, Columbus
Convener	<i>Hadronic B Meson Decays</i> working group BaBar Physics Workshops, 1997-1998

## OTHER PROFESSIONAL ACTIVITIES

Convener	<i>Frontier for Rare Processes and Precision Measurements</i> 2021 US HEP Community Planning Exercise (Snowmass)
Member	Belle Physics Advisory Committee, 2021-22, KEK, Japan
Member	<i>Intensity Frontier Fellowship Committee</i> Fermilab 2016-20
Advisory Board	<i>Natural Sciences Department</i> Lawrence Technical University 2018-21

Theory Coordinator	<i>Charm Working Group</i> Belle II-Theory Interface Platform, KEK (Japan) 2014-17
External Thesis Examiner	<i>Department of Physics</i> , University of Toronto, 2015
Task Force Leader	<i>Charm Quark Task Force, Intensity Frontier</i> 2013 US HEP Community Planning Exercise (Snowmass)
Member	<i>Program Committee</i> APS Topical Group on Hadronic Physics, 2002-2006
Member	<i>CESR Tau-Charm Factory</i> Task Force Cornell University, 2000
Referee	Phys. Rev. Letters, Physical Review D, Eur. Phys. J. C, J. of Physics G, Phys. Letters B, J. of High Energy Physics
Proposal reviewer	U.S. Department of Energy, U.S. National Science Foundation Research Corporation (USA), NSERC (Canada), Swiss National Science Foundation
Member	Deutsche Forschungsgemeinschaft (DFG) <i>institute review panel</i> Bonn U. (2020)
Member	DOE Office of Science <i>site visit panels</i> Northwestern U. (2007), Purdue U. (2008), U of Arizona (2009), USQCD (2019)
Member	NSF Division of Astronomical Sciences <i>grant review panels</i> NSF Division of Physics <i>grant review panels</i>

## EXTERNAL FUNDING

**Note:** currently active grants are denoted in **bold face**.

Title: “Particle Physics Research Program”, Task-B (Theory)

Grant PD and task P.I.: Alexey A. Petrov

Source: US Department of Energy (current: DE-SC0007983)

**Total Operating Budget for Task-B [4/18-3/22]: \$614,000 (with G. Paz, N. Shah)**

Total Operating Budget for Task-B [4/15-3/18]: \$510,000 (with G. Paz)

Total Operating Budget for Task-B [5/12-4/15]: \$345,000 (sole investigator)

Total Operating Budget for Task-B [3/09-3/12]: \$258,000 (sole investigator)

Total Operating Budget for Task-B [3/06-3/09]: \$253,000 (sole investigator)

Total Operating Budget for Task-B [3/03-3/06]: \$98,000 (sole investigator)

Title: “REU Site: Research Experience in Astrophysics, Nuclear and Particle Physics”,

Grant P.I.: A. A. Petrov, co-P.I.: D. Cinabro

Source: National Science Foundation (PHY-1460853, 02/15-01/18)

Total Award Amount: \$291,232

Source: National Science Foundation (PHY-1156651, 02/12-01/16)

Total Award Amount: \$322,080

Source: National Science Foundation (PHY-0851678, 01/09-12/12)

Total Award Amount: \$287,291

Title: "CAREER: An Integrated Research and Education Program in Physics of Heavy Hadrons",

Grant P.I.: Alexey A. Petrov

Source: National Science Foundation (PHY-0547794, 3/06-2/11)

Total Award Amount: \$400,000 (sole investigator)

Title: "Request for Funding Support of the 2009 DPF Meeting at Wayne State University; Detroit, Michigan; July 26-31,2009",

Grant P.I.: A. A. Petrov, co-P.I.: P. Karchin

Source: National Science Foundation (PHY-0855436, 6/09-6/10)

Total Award Amount: \$10,000

Title: "Request for Funding Support of the 2009 DPF Meeting at Wayne State University; Detroit, Michigan; July 26-31, 2009",

Grant P.I.: P. Karchin, co-P.I.: A. A. Petrov

Source: US Department of Energy

Total Award Amount: \$45,000

Title: "REU Site for Undergraduate Research in Accelerator, Nuclear and Particle Physics",

Grant P.I.: G. Bonvicini, co-P.I.: D. Cinabro, S. Gavin, A. A. Petrov, C. Pruneau

Source: National Science Foundation (PHY-0353994, 1/04-12/07)

Total Award Amount: \$397,533 (20% for Petrov)

Title: "Research Program in Theoretical Particle Physics",

Grant P.I.: Alexey A. Petrov

Source: National Science Foundation (PHY-0244853, 8/03-8/06)

Total Award Amount: \$60,000 (100% for Petrov)

## **RECENT COMPETITIVE INTERNAL SUPPORT**

Title: "Supplemental support for a Postdoctoral Research Associate",

Grant P.I.: Alexey A. Petrov

Source: Office of Vice-President for Research, Wayne State University

Total Award Amount [6/16-6/18]: \$60,000

Total Award Amount [6/12-6/14]: \$60,000

Total Award Amount [6/09-6/11]: \$60,000

Title: "Theoretical issues in LHC physics"

Grant P.I.: Alexey A. Petrov

Source: Faculty Competition for Graduate Research Assistants (9/12-8/13)

Total Award Amount: \$19,646 + fringes

## TEACHING EXPERIENCE

**Graduate:** Quantum Field Theory I/II, Particle Physics, Relativistic Quantum Mechanics/Special Topics, Quantum Mechanics I/II, Methods of Theoretical Physics II.

**Undergraduate:** General Physics I/II, Methods of Theoretical Physics I, Mechanics I/II.

## SUPERVISION OF STUDENTS AND POSTDOCS

Six students received Ph.D. and two students received Masters under my supervision. I am currently supervising two graduate students and one postdoctoral fellow. **Note:** student/postdoc position after graduation is noted in brackets

Ph.D.	2008	Mohammad AlFiky [Lecturer, Ain Shams U. (Egypt)]
	2010	Andriy Badin [Postdoc, Duke U.]
	2011	Gagik Yeghiyan [Asst. Prof., Grand Valley State U.]
	2013	Kristopher Healey [Postdoc, U. of Turin (Italy)]
	2014	Y. G. Aditya [Lecturer, Rochester Institute of Technology]
	2017	Derek Hazard [postdoc, Oakland U.]
	2021	Renae Conlin, Cody Grant (expected)
MA/MS	2002	Mingshan Sun
	2009	Marouane Salhi
Postdoc	2017-19	James Osborne [Postdoc, UC San Diego]
	2016-17	Bhubanjyoti (Bhujyo) Bhattacharya [Faculty, Lawrence Tech U.]
	2012-14	Dmitry Zhuridov [Faculty, U. of Silesia (Poland)]
	2009-12	Andrew Blechman [Faculty, Roper Schools]
	2007-08	Cosimo Bambi [Postdoc, IPMU, Tokyo U. (Japan)]
	2003-06	Fabrizio Gabbiani [Industry]
	2002-04	Andrey Onishchenko [Postdoc, Hamburg U. (Germany)]

## PUBLIC PRESENTATION AS AN EXPERT IN DISCIPLINE

- “Vera Rubin and the Puzzle of Missing Matter”  
lecture at the 2017 Conference for Undergraduate Women in Physics, 01/14/2017
- “Higgs and the Puzzle of Missing Matter in the Universe.”  
public lecture “Science Under the Dome,” 11/12/2015
- “What is happening at Japan’s Fukushima Nuclear Power Station?”  
interview, 101.9 WDET radio station, 04/14/2011  
public lecture “Science Under the Dome,” 04/15/2011

**SCIENTIFIC ADMINISTRATIVE SERVICE (selected recent appointments)****International Scientific Committee Membership**

1. **Belle Program Advisory Committee (BPAC), KEK, Japan (2020-22).** As a BPAC advisor, I provided recommendations on scientific, technical, and planning issues related to the Japan's High Energy Accelerator Research Organization (KEK) B-factory project, mainly focusing on progress of the Belle II experiment.

**National Scientific Committee Leadership**

1. **Convener, Rare Processes and Precision Measurements Frontier (2020-21).** The 2021 Long-term Planning Exercise for particle physics in the US (aka "Snowmass") is a scientific study which is organized by the Division of Particles and Fields of the American Physical Society. It aims to determine scientific priorities of the US particle physics in the next decade and communicate the opportunities for discovery in particle physics to the broader scientific community and to the US government. The work is divided among ten scientific and support Frontiers. As a co-convener (co-leader) of the Frontier for Rare Processes and Precision Measurements, I lead the activities of hundreds of US and international physicists to document a scientific vision for the future of particle physics in the U.S. and its international partners for accelerator and non-accelerator research in the field of rare processes and precision measurements (<https://snowmass21.org/rare/>).

**University and College-level Committee Chairmanship and Membership**

1. **President, WSU Academy of Scholars (2020-21).** The Academy of Scholars is an organization within Wayne State University that was established to advise the University in intellectual and artistic concerns. Its members are chosen from the most productive and widely recognized scholars at the University. The functions of the Academy are to promote creative achievement in scholarship by recognition and provision of incentives, to attract young scholars of outstanding promise, to bring to the University for a given period of time distinguished scholars from other institutions, to sponsor meetings of all types which stimulate interdisciplinary intellectual activity, and to promote intellectual interchange at all levels. As elected President, I directed day-to-day activities of the Academy, including budgeting, fund raising, committee assignments, and running its monthly meetings (<https://academy.wayne.edu>).
2. **Co-chair, Special Presidential Committee on research reputation (2017-19).** Appointed by WSU President, I led the activities of representatives of several WSU administrative offices to understand and improve the status of WSU's international research and reputation rankings.
3. **Chair, Research Committee of the WSU Academic Senate (2015-18).** As a Chair of the Academic Senate's Research Committee, I directed the work of the

committee of WSU faculty from four different colleges to assess and improve WSU research enterprise. Advised Academic Senate and Vice President for Research of the findings. Researched and delivered several presentations on the status of WSU's international research and reputation rankings.

4. **WSU Center and Institute Advisory Committee (2016-19)**. This committee, headed by the Vice President for Research, performs review of activities of the University-level research centers. I conducted a site visit and recommended rechartering of the Center for Molecular Medicine and Genetics (my main responsibility) and other research institutes.
5. **WSU Academic Senate (2012-18)**. Twice elected from the College of Liberal Arts and Sciences for two consecutive three year terms.
6. **Strategic Plan Committee of WSU College of Liberal Arts and Sciences (2014-16)**. This multi-departmental committee, headed by the Dean of College of Liberal Arts and Sciences, set strategic goals and objectives for the College in the next five years. As a member of this committee, I performed assessment of strengths and weaknesses of the College's research program.
7. **Undergraduate Instructional Building Committee (2013)**. This committee, headed by the Associate Vice President for the Facilities Planning and Management, drafted a proposal for the Science Instructional Building, which emphasized large high tech classrooms for active learning approaches to science teaching. I spearheaded writing of the proposal that was endorsed by WSU administration.
8. **College of Liberal Arts and Sciences' Undergraduate Research Fair Committee (2013)**. I proposed the creation of this committee and actively participated in its activities. The exercise resulted in establishment of Annual Undergraduate Research Fair aimed at increasing participation of undergraduate students in research.

## Department-level Committees

### *Chairmanship*

1. **Physics-Engineering AGRADE program (2015)**. I proposed and then lead the creation of the Physics-Electrical Engineering Accelerated Graduate Enrollment (AGRADE) program. This AGRADE program enables highly qualified Physics seniors to enroll simultaneously in Physics undergraduate and Engineering graduate programs to complete both B.S. in Physics and M.S. in Electrical Engineering in five years.
2. **Research Funding Committee (2014)**. I proposed and then chaired the committee of senior faculty aimed at increasing the rate of successful external funding of applications from junior faculty in the Department of Physics and Astronomy. I created and run mock NSF reviews for faculty's grant proposals. Four Assistant Professors took part in the program, one of them (biophysics) received an NSF CAREER award in the following year.
3. **Undergraduate Recruitment and Retention Committee (2012-16)**. As a Chair, I introduced data-driven and goal-oriented approach to recruitment of new un-



dergraduate physics, astronomy and biomedical physics majors, increasing the number of entering students by a factor of two. Our approach was replicated and implemented by the WSU Office of Enrollment Management for Fall 2014 admissions.

4. **Graduate Recruitment Committee (2008-10).** As a Chair, I introduced data-driven and goal-oriented approach to graduate student recruitment.
5. **Program Director for the Research Experience for Undergraduates (REU) program at WSU (2008-18).** I revitalized failing REU program at WSU. Under my leadership the program re-acquired funding and has been continuously funded by the external NSF grant for nine years. It attracted students from leading US Universities for a ten-week research program at WSU. I stepped down as a PI/PD in 2018 as part of our PI rotation program.
6. **Particle Theory Faculty Search Committee (2010-11).** I oversaw a successful hiring of Prof. Gil Paz to the faculty of the Department of Physics and Astronomy.
7. **Faculty advisor for the Society of Physics Students (SPS) (2001-11).** I revitalized activities of failing SPS. At the end of my appointment, SPS has tripled its membership. It now runs a well-regarded regional annual physics workshop conference for undergraduate students and helps with daily activities for WSU physics majors. I was awarded a “Campus Leadership Award” for my work with WSU SPS.

### *Membership*

1. **Executive Committee (2010-2014, 2016-20).** Elected four times by Physics and Astronomy faculty in the last ten years for two-year terms. Advised Department Chair on general facets of the Department affairs.
2. **Faculty Search Committees (2010-11).** I participated in successful hirings of Prof. Ed Cackett (observational astronomy) and Prof. Abhijit Majumder (nuclear theory) to the faculty of the Department of Physics and Astronomy.
3. **Strategic Plan Development Committee (2009-10 and 2014-16).** Appointed by the Chair to develop the assessment of strengths and weaknesses of the Department of Physics and Astronomy and set the goals for its five-year development. Recommendations included balanced faculty hiring plan that strengthens the Department’s research and educational missions and promotes gender equality, equal opportunities, and diversity, plan of research and educational infrastructure upgrades, and measures to improve graduate and undergraduate teaching.

## RESEARCH PUBLICATIONS

**Note:** in theoretical high energy physics order of author lists is traditionally **alphabetical**.  
**Below:** \* denotes papers with 50+ citations, \*\* denotes papers with 100+ citations, \*\*\* denotes papers with 250+ citations, \*\*\*\* denotes papers with 500+ citations, and \*\*\*\*\* denotes papers with 1000+ citations. Total number of citations is 9,000+. My h-index is 42 (inSPIRE) and 43 (Google Scholar) [<https://inspirehep.net/authors/993563>].

### Invited review articles

1. *What's in a Shape? [A story of electron's EDM]*  
A. A. Petrov  
American Scientist, March-April 2019, 94-97
2. *Future Physics Programme of BESIII* \*  
M. Ablikim, ..., A. A. Petrov, *et al.* [BESIII Collaboration + theorists],  
Chin. Phys. C 44 (2020) 4, e-print Archive: arXiv:1912.05983 [hep-ex]
3. *The Belle II Physics Book* \*\*\*  
E. Kou, ..., A. A. Petrov, *et al.*, [Belle II Collaboration + theorists ]  
PTEP **2019**, no. 12, 123C01 (2019), e-print Archive: arXiv:1808.10567 [hep-ex]
4. *Implications of LHCb measurements and future prospects* \*\*\*  
R. Aaij, ..., A. A. Petrov, *et al.* [LHCb Collaboration + theorists],  
Eur. Phys. J. **C73**, 2373 (2013), e-print Archive: arXiv:1208.3355 [hep-ex]
5. *Hadronic D and D<sub>s</sub> meson decays*,  
A. Ryd and A. A. Petrov,  
Rev. Mod. Phys. **84**, 65 (2012), e-print Archive: arXiv:0910.1265 [hep-ph]
6. *Heavy quarkonium: progress, puzzles, and opportunities* \*\*\*\*\*  
N. Brambilla, ..., A. A. Petrov, *et al.*  
Eur. Phys. J. **C71**, 1534 (2011), e-print Archive: arXiv:1010.5827 [hep-ph]
7. *Charm meson decays* \*  
M. Artuso, B. Meadows, A. A. Petrov,  
Ann. Rev. Nucl. Part. Sci. **58**, 249 (2008), e-print Archive: arXiv:0802.2934 [hep-ph]
8. *The potential for neutrino physics at muon colliders and dedicated high current muon storage rings*  
I. Bigi, T. Bolton, J. Formaggio, D. Harris, J. Morfin, P. Spentzouris, J. Yu, B. Kayser, B.J. King, K. McFarland, Alexey A. Petrov, H. Schellman, M. Velasco, R. Shrock  
Phys. Rept. **371**, 151-230, 2002 e-print Archive: hep-ph/0106177

### Research papers

1. *Shining dark matter in Xenon1T*  
G. Paz, A. A. Petrov, M. Tammaro, J. Zupan,  
submitted to Phys. Rev. Lett., e-print Archive: arXiv:2006.12462 [hep-ph]

2. *Muonium-antimuonium oscillations in effective field theory*  
R. Conlin and A. A. Petrov,  
Phys. Rev. D **102**, 9, 095001 (2020), e-print Archive: arXiv:2005.10276 [hep-ph]
3. *Semileptonic decays of heavy mesons with artificial neural networks*  
C. M. Grant, A. Gunawardana, A. A. Petrov,  
Phys. Rev. D **102**, 3, 034003 (2020), e-print Archive: arXiv:1912.09058 [hep-ph]
4. *Invisible widths of heavy mesons*  
B. Bhattacharya, C.M. Grant, A. A. Petrov,  
Phys. Rev. D **99**, 093010 (2019), e-print Archive: arXiv:1809.04606 [hep-ph]
5. *Studies of Lepton Flavor Violation at the LHC*  
B. Bhattacharya, R. Morgan, J. Osborne, A. A. Petrov,  
Phys. Lett. B **785**, 165 (2018), e-print Archive: arXiv:1802.06082 [hep-ph]
6. *Radiative lepton flavor violating  $B$ ,  $D$ , and  $K$  decays*  
D. E. Hazard and A. A. Petrov,  
Phys. Rev. D **98**, 015027 (2018), e-print Archive: arXiv:1711.05314 [hep-ph]
7. *Hadronic decays of  $B_c$  mesons with flavor  $SU(3)_F$  symmetry*  
B. Bhattacharya and A. A. Petrov,  
Phys. Lett. B **774**, 430 (2017), e-print Archive: arXiv:1708.07504 [hep-ph]
8. *Direct CP asymmetry in  $D \rightarrow \pi^+\pi^-$  and  $D \rightarrow K^+K^-$  in QCD-based approach*  
A. Khodjamirian and A. A. Petrov,  
Phys. Lett. B **774**, 235 (2017), e-print Archive: arXiv:1706.07780 [hep-ph]
9. *Lepton flavor violating quarkonium decays*  
D. E. Hazard and A. A. Petrov,  
Phys. Rev. D **94**, 074023 (2016), e-print Archive: arXiv:1607.00815 [hep-ph]
10. *Direct probes of flavor-changing neutral currents in  $e^+e^-$  collisions*  
A. Khodjamirian, T. Mannel and A. A. Petrov,  
JHEP 11 (2015) 142, e-print Archive: arXiv:1509.07123 [hep-ph]
11. *The role of low-energy observables in precision Higgs analysis*  
A. A. Petrov, S. Pokorski, J. D. Wells, Z. Zhang  
Phys. Rev. D **91**, 073001 (2015) 7, e-print Archive: arXiv:1501.02803 [hep-ph]
12.  *$D^\pm$  production asymmetry at the LHC from heavy-quark recombination*  
W. K. Lai, A. K. Leibovich, A. A. Petrov  
Phys. Rev. D **90**, 054022 (2014) 5, e-print Archive: arXiv:1408.2843 [hep-ph]
13. *Searching for dark matter at LHC with Mono-Higgs production \**  
A. A. Petrov, W. Shepherd  
Phys. Lett. B **730**, 178 (2014), e-print Archive: arXiv:1311.1511 [hep-ph]

14. *Lepton flavor-violating transitions in effective field theory and gluonic operators*  
A. A. Petrov, D. Zhuridov  
Phys. Rev. D **89**, 033005 (2014), e-print Archive: arXiv:1308.6561 [hep-ph]
15. *Nonstandard neutrino interactions and transition magnetic moments*  
K. J. Healey, A. A. Petrov, D. Zhuridov  
Phys. Rev. D **87**, 117301 (2013), e-print Archive: arXiv:1305.0584 [hep-ph]
16. *Faking  $B_s \rightarrow \mu^+ \mu^-$ ,*  
Y. G. Aditya, K. J. Healey, A. A. Petrov  
Phys. Rev. D **87**, 074028 (2013), e-print Archive: arXiv:1212.4166 [hep-ph]
17. *Searching for super-WIMPs in leptonic heavy meson decays,*  
Y. G. Aditya, K. J. Healey, A. A. Petrov  
Phys. Lett. B **710**, 118 (2012), e-print Archive: arXiv:1201.1007 [hep-ph]
18. *Relating  $B_s$  Mixing and  $B_s \rightarrow \mu^+ \mu^-$  with New Physics,*  
E. Golowich, J. Hewett, S. Pakvasa, A. A. Petrov, G. Yeghiyan  
Phys. Rev. D **83**, 114017 (2011), e-print Archive: arXiv:1102.0009 [hep-ph]
19. *The flavor puzzle in multi-Higgs models,*  
A. E. Blechman, A. A. Petrov, G. Yeghiyan  
JHEP 11 (2010) 075, e-print Archive: arXiv:1009.1612 [hep-ph]
20. *Searching for light Dark Matter in heavy meson decays,*  
A. Badin and A. A. Petrov,  
Phys. Rev. D **82**, 034005 (2010), e-print Archive: arXiv:1005.1277 [hep-ph]
21. *Initial determination of the spins of the gluino and squarks at LHC,*  
G. L. Kane, A. A. Petrov, J. Shao, L.-T. Wang,  
J. Phys. **G37**, 045004 (2010), e-print Archive: arXiv:0805.1397 [hep-ph]
22. *Relating  $D^0 - \bar{D}^0$  mixing and  $D^0 \rightarrow \ell^+ \ell^-$  with New Physics \*\**  
E. Golowich, J. Hewett, S. Pakvasa and A. A. Petrov,  
Phys. Rev. D **79**, 114030 (2009), e-print Archive: arXiv:0903.2830 [hep-ph]
23. *Black holes as antimatter factories,*  
C. Bambi, A. D. Dolgov, and A. A. Petrov,  
JCAP 0909:013, 2009, e-print Archive: arXiv:0806.3440 [astro-ph]
24. *Primordial black holes and the observed Galactic 511 keV line,*  
C. Bambi, A. D. Dolgov, and A. A. Petrov,  
Phys. Lett. B **670**, 174 (2008), e-print Archive: arXiv:0801.2786 [astro-ph]
25. *Lifetime difference in  $D^0 - \bar{D}^0$  mixing within R-parity-violating SUSY,*  
A. A. Petrov and G. K. Yeghiyan,  
Phys. Rev. D **77**, 034018 (2008), e-print Archive: arXiv:0710.4939 [hep-ph]

26. *Lifetime difference in  $B_s$  mixing: Standard Model and beyond* \*  
A. Badin, F. Gabbiani, and A. A. Petrov,  
Phys. Lett. B **653**, 230 (2007), e-print Archive: arXiv:0707.0294 [hep-ph]
27. *Implications of  $D^0 - \bar{D}^0$  mixing for New Physics* \*\*\*  
E. Golowich, J. Hewett, S. Pakvasa and A. A. Petrov,  
Phys. Rev. D **76**, 095009 (2007), e-print Archive: arXiv:0705.3650 [hep-ph]
28. *New Physics contributions to the lifetime difference in  $D^0 - \bar{D}^0$  Mixing* \*  
E. Golowich, S. Pakvasa, and A. A. Petrov,  
Phys. Rev. Lett. **98**, 181801 (2007), e-print Archive: hep-ph/0610039
29. *Neutrinos in a left-right model with a horizontal symmetry*  
K. Kiers, M. Assis, D. Simons, A. A. Petrov, and A. Soni,  
Phys. Rev. D **73**, 033009 (2006), e-print Archive: hep-ph/0510274
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31. *Short Distance Analysis of  $D^0 - \bar{D}^0$  Mixing* \*  
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33. *Spectator effects and lifetimes of heavy hadrons* \*\*  
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34. *Hunting for CP violation with untagged charm decays*  
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35. *The  $D^0 - \bar{D}^0$  mass difference from a dispersion relation* \*\*  
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36. *Comment on the new  $D_s^{(*)+}\pi^0$  resonances* \*\*  
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37.  *$B^0 - \bar{B}^0$  mixing beyond factorization in QCD sum rules*  
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38.  $\Lambda_b$  lifetime puzzle in heavy-quark expansion \*  
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39. Lifetime differences in heavy mesons with time independent measurements \*  
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40.  $SU(3)$  breaking and  $D^0 - \bar{D}^0$  mixing \*\*\*  
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41. Comments on color suppressed hadronic  $B$  decays \*  
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42. Two-loop renormalization of heavy-light currents at order  $1/m_Q$  in the heavy-quark expansion  
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44. Lessons from CLEO and FOCUS measurements of  $D^0 - \bar{D}^0$  mixing parameters \*\*  
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45. Measuring  $\gamma$  cleanly with CP-tagged  $B_s$  and  $B_d$  decays  
A. F. Falk, A. A. Petrov  
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46. Strong phases and  $D^0 - \bar{D}^0$  mixing parameters \*  
A. F. Falk, Y. Nir, A. A. Petrov  
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47. Phenomenology of  $V_{ub}$  from ratios of inclusive  $B$  decay rates  
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48. Charmonium production at neutrino factories  
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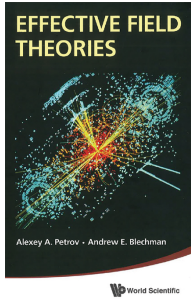
49. *Measuring  $V_{ub}$  in inclusive  $B$  decays to charm*  
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50. *Radiative leptonic  $B_c$  decays in effective field theory*  
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51. *Hybrid charmonium production in  $B$  decays*  
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52. *Can nearby resonances enhance  $D^0 - \bar{D}^0$  mixing? \**  
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53. *Intrinsic charm of light mesons and  $CP$  violation in the heavy quark decay*  
A. A. Petrov  
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54. *Final state interactions and New Physics in  $B \rightarrow \pi K$  decays \*\**  
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55. *Theory and phenomenology of non-leptonic  $B$  meson decay*  
A. A. Petrov  
Ph. D. Dissertation (University of Massachusetts)
56.  *$\eta'$  production in  $B$ -decays: Standard Model vs. New Physics \*\**  
A. L. Kagan, A. A. Petrov  
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57. *Dipenguin contribution to  $D^0 - \bar{D}^0$  mixing \**  
A. A. Petrov  
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58. *How to trap a non-standard penguin? Isospin symmetry violations in  $B$ -decays with enhanced chromomagnetic dipole operator*  
A. A. Petrov  
Phys. Lett. B399, 172 (1997), e-print Archive: hep-ph/9612393
59. *Factorization in non-leptonic heavy meson decays*  
J. F. Donoghue, A. A. Petrov  
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60. *Final state rescattering as a contribution to  $B \rightarrow \rho\gamma$*   
J. F. Donoghue, E. Golowich, A. A. Petrov  
Phys. Rev. D55, 2657 (1997), e-print Archive: hep-ph/9609530
61. *Systematics of soft final state interactions in  $B$  decay* \*\*  
J. F. Donoghue, E. Golowich, A. A. Petrov, J. M. Soares  
Phys. Rev. Lett. 77, 2178 (1996), e-print Archive: hep-ph/9604283
62. *Is  $B \rightarrow X_s\gamma$  equal to  $b \rightarrow s\gamma$ ? Spectator contributions to rare inclusive  $B$  decays*  
J. F. Donoghue, A. A. Petrov  
Phys. Rev. D53, 3664 (1996), e-print Archive: hep-ph/9510227

## NOTES AND REPORTS

1. *Opportunities in Flavour Physics at the HL-LHC and HE-LHC* \*  
A. Cerri, ..., A. A. Petrov, *et al.*,  
e-print Archive: arXiv:1812.07638 [hep-ph]
2. *SuperB Progress Reports – Physics* \*\*\*  
B. O’Leary, ..., A. A. Petrov, ... *et al.*, arXiv:1008.1541 [hep-ex]
3. *Flavor Physics in the Quark Sector* \*\*\*  
M. Antonelli, ..., A. A. Petrov, ... *et al.*,  
Phys. Rept. 494, 197, (2010), arXiv:0907.5386 [hep-ph]
4. *Renaissance of the 1-TeV Fixed-Target Program*  
T. Adams, ..., A. A. Petrov, ... *et al.*, Int. J. Mod. Phys. **A25**, 777, (2010)
5.  *$B$ ,  $D$  and  $K$  decays* \*\*\*  
M. Artuso, ..., A. A. Petrov, ... *et al.*, Eur. Phys. J. **C57**, 309-492, (2008),  
e-Print: arXiv:0801.1833 [hep-ph]
6. *SuperB: A High-Luminosity Asymmetric  $e^+e^-$  Super Flavor Factory (CDR)* \*\*\*\*  
M. Bona, ..., A. A. Petrov, ... *et al.*, arXiv:0709.0451 [hep-ex]
7. *The Discovery potential of a Super B Factory* \*\*  
J. Hewett, ..., A. A. Petrov, ... *et al.*, e-Print: hep-ph/0503261
8. *Monte-Carlo event generator of inclusive electron-nucleon scattering*  
P. V. Degtyarenko, A. A. Petrov  
**CLAS-NOTE 94-022** (Jefferson Lab internal note), Nov 1994.



**TEXTBOOKS**

“Effective field theories,”

Alexey A. Petrov and Andrew E. Blechman,  
 Hardcover, 320 pages, *World Scientific Publishing Company*,  
 ISBN-10: 9814434922, ISBN-13: 978-9814434928.

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**EDITED PROCEEDINGS AND BOOK CHAPTERS**

1. “Proceedings of the 7th International Workshop on Charm Physics (CHARM 2015),” Detroit, Michigan, 2015, edited by Alexey A Petrov, eConf C1505186 (2017).
2. “Proceedings of the 2015 Meeting of the Division of Particles and Fields of the American Physical Society (DPF 2009),” Detroit, Michigan, 2009, edited by Paul E. Karchin and Alexey A Petrov, eConf C090726 (2009).
3. “The first meeting of the APS Topical Group on Hadronic Physics,” edited by: Ted Barnes, Steve Godfrey, Alexey A Petrov and Eric Swanson *J. Phys.: Conf. Ser.* 9 (2005), 1-330
4. “Hadronic B Meson Decays” (with I. Bigi, P. Rankin, R. Waldi, and D. Wyler) in *The BaBar Physics Book*, SLAC, 1998.

**SUMMER SCHOOL LECTURES**

1. *Theory of CP-violation*  
 Presented at 2nd Belle II Physics Week (<https://indico.belle2.org/event/493/overview>) (KEK, Japan, 28 October - 1 November 2019)
2. *Theoretical Review of Charm Physics*  
 Presented at 2019 Belle II Summer School (<https://www.bnl.gov/belle2ss2019/>) (Brookhaven National Laboratory, New York, 29 July - 2 August 2019)

**INVITED CONFERENCE PRESENTATIONS**

1. *CP-violation in charm with LCSR*  
*Lepton flavor violating meson decays*  
 Presented at Heavy Quark Physics and Fundamental Symmetries workshop, (INT, University of Washington (Seattle), USA, 8/2019) (plenary)

2. *Effective Field Theories and phenomenology in charm*  
Presented at the Lattice QCD and Effective Field Theories workshop,  
(IAS, Munich, Germany, 10/2018) (plenary)
3. *Flavor violation in quarks and leptons*  
Presented at the at the Heavy Quarks through the Looking Glass workshop  
(Siegen, Germany, 10/4-10/05, 2018) (plenary)
4. *Invisible widths of heavy mesons*  
Presented at the at the Flavor and Dark Matter 2018 workshop  
(KIT, Karlsruhe, Germany, 09/24-09/26, 2018) (plenary)
5. *New approaches for exclusive predictions for charm mixing*  
Presented at the 10th International Workshop on the CKM Unitarity Triangle (CKM  
2018)  
(Heidelberg, Germany, 09/17-09/21, 2018)
6. *Rare Charm Decays: A Quest for New Physics?*  
Presented at the at the workshop CHARM-2018 (remotely)  
(Novosibirsk, Russia, 05/21-05/24, 2018) (plenary)
7. *Prospects for theoretical predictions for indirect CP-violation in charm*  
Presented at the at the Workshop on Ultimate Precision in Flavor Physics  
(Warwick, UK, 04/16-04/18, 2018) (plenary)
8. *Lepton flavor violation at the LHC*  
Presented at the at the HE/HL LHC workshop  
(Fermilab, Batavia, IL 04/04-04/06, 2018)
9. *Mixing of charmed mesons: theoretical overview*  
Presented at the workshop HIEPA II (2018)  
(UCAS, Beijing, China, 03/18-03/21, 2018)
10. *Direct CP asymmetry in  $D \rightarrow \pi\pi$  and  $D \rightarrow KK$  in QCD*  
Presented at the American Physical Society (APS) Meeting of the Division of Particles  
and Fields  
(Fermilab, Batavia, IL, 7/31-8/3, 2017)
11. *Theoretical aspects of exclusive approach to mixing in charmed mesons*  
Charming Peaks workshop,  
(Great Hucklow, Buxton, UK, 6/26-6/28/2017)
12. *Lepton Flavor Violation in effective field theories*  
Low-energy Probes of New Physics,  
(Mainz, Germany, 5/22-5/24/2017)

13. *Lepton Flavor Violation at high and low energies*  
New physics at the junction of flavor and collider phenomenology,  
(Portoroz, Slovenia, 4/18-4/21/2017)  
Workshop on New Physics interpretations at the LHC II,  
(Argonne National Lab, IL, 4/5-4/7/2017)
14. *Theory of rare D decays*  
9th International Workshop on the CKM Unitarity Triangle,  
(TIFR, Mumbai, India, 11/28-12/3/2016)
15. *CP-violation in charm: theoretical perspectives*  
Implications of the LHCb measurements, (CERN, Geneva, Switzerland, 10/12-10/14/2016)
16. *Low-energy observables and precision Higgs analyses*  
Effective Field Theories & Lattice workshop,  
(IAS, Munich, Germany, 05/18-05/22/2016) (plenary)
17. *Constraints on New Physics from charm mixing and rare decays*  
16th International Conference on B-Physics at Frontier Machines (BEAUTY-2016),  
(Marseille, France; 2-6 May 2016) (plenary) [arXiv:1609.04448 [hep-ph]].
18. *Flavor physics in the LHC era*  
APS April meeting (Salt Lake City, UT, USA; 16-19 April 2016)
19. *Low-energy observables and precision Higgs analyses*  
Symposium on Effective Field Theories and Lattice Gauge Theory (Munich, Germany;  
18-22 May 2016) (plenary)  
The 4th MCTP Spring Symposium (Ann Arbor, MI, USA; 20-22 April 2015) (plenary)
20. *CP-violation in charm*  
The XI International Conference on Hyperons, Charm and Beauty  
Hadrons (BEACH 2014) (Birmingham, UK, 2014) (plenary);  
50 years of CP violation (QMUL, London, UK; 2014) (plenary)
21. *Perspectives in flavor physics*  
LoopFest XIII: Radiative corrections for the LHC and Future Colliders  
(New York City, 18-20 June 2014) (plenary)
22. *Charm physics: past, present and future*  
Fifth Workshop on Theory, Phenomenology and Experiments in Flavour Physics  
(Capri, Italy, 23-25 May 2014) (plenary)
23. *Flavor physics in the LHC era*  
The 2014 Phenomenology Symposium (Pittsburgh, PA, 5-7 May 2014) (plenary)

24. *Long-distance effects in charm mixing*  
6th International Workshop on Charm Physics (Manchester, UK, 2013)  
arXiv:1312.5304 [hep-ph] (plenary).
25. *Perspectives in charm physics (theory)*  
Intensity Frontier Workshop (Argonne National Lab, 25-27 April 2013)
26. *Theory Summary (new physics with heavy flavors)*  
Chicago 2012 Workshop on LHC Physics, (Chicago, IL, USA, November 2012)
27. *Theory of rare D decays,*  
7th International Workshop on the CKM Unitarity Triangle (CKM-2012)  
Cincinnati, OH, USA September 2012
28. *Long-distance effects in charm mixing & Rare  $B_s$  decays and  $B_s$ -mixing*  
Workshop "Implications of LHCb measurements and future prospects,"  
CERN, Switzerland, November 2011
29. *Charm physics*  
Workshop "Colour meets flavour,"  
Siegen, Germany, October 2011
30. *CP-violation in charm*  
WE-Heraeus-Seminar on "Physics at LHCb"  
Physikzentrum Bad Honnef, Germany, April 2011.  
CKM-2010 Warwick, UK, 09/2010 [arXiv:1101.3822 [hep-ph]].
31. *Theoretical Status of Charm*  
12th International Conference on B-Physics at Hadron Machines (BEAUTY-2009),  
Heidelberg, Germany, September 2009 (plenary) [arXiv:1003.0906 [hep-ph]].  
"Lattice Meets Phenomenology"  
Durham, UK, September 2010 (plenary).
32. *Searching for New Physics with charm*  
Progress and Challenges in Flavour Physics (Primosten09)  
Primosten, Croatia, September 2009 (plenary)  
International Workshop on Tau-Charm Physics (CHARM-2009)  
Leimen, Germany, May 2009 (plenary)
33. *Charm Physics (Theory)*  
CERN Theory Institute *Flavour as a Window to New Physics at the LHC*,  
CERN, Geneva, May 2008 (plenary)
34. *New Physics in charm mixing*  
7th Workshop on Continuous Advances in QCD, Minneapolis, May 2008

35. *Implications of charm mixing for New Physics*  
*Anticipating Physics at the LHC* workshop, KITP, UC Santa Barbara, CA, May 2008
36. *Constraining New Physics from  $D^0 - \bar{D}^0$  mixing*  
XLIIIrd *Rencontres de MORIOND*, Electroweak Session,  
La Thuile, May 2008 (plenary), [arXiv:0806.2498 [hep-ph]]
37. *Final state interactions in B-decays*  
The 2nd meeting of the APS Topical Group on Hadronic Physics  
Nashville, TN, October 2006, (plenary)  
Published in J.Phys.Conf.Ser.69:012010,2007
38. *Physics of charm: mixing and CP-violation*  
ITEP Meeting on the Future of Heavy Flavour Physics  
Moscow, Russia, July 2006 (plenary)
39. *Charm mixing beyond the Standard Model*  
International Workshop on Tau-Charm Physics (CHARM-2006)  
Beijing, China, June 2006, Int. J. Mod. Phys. A21 (2006) 5686 (plenary)
40. *Heavy Meson Molecules in Effective Field Theory*  
7th Workshop on Continuous Advances in QCD, Minneapolis, 2006 [hep-ph/0609215]
41. *Charm physics and CP violation*  
6th International Conference on Hyperons, Charm and Beauty Hadrons  
Published in Nucl. Phys. Proc. Suppl. 142: 333-339, 2005  
Chicago, IL, July 2004, [hep-ph/0409130 ] (plenary)
42. *Lifetimes of heavy hadrons*  
6th Workshop on Continuous Advances in QCD, Minneapolis, May 2004  
[hep-ph/0408093 ]
43. *Charm physics: Theoretical review*  
Flavor Physics and CP Violation (FPCP 2003), Paris, France, 3-6 Jun 2003  
[hep-ph/0311371] (plenary)
44. *Charm phenomenology for CKM parameters*  
2nd Workshop on the CKM Unitarity Triangle, Durham, England, 5-9 Apr 2003  
eConf **C0304052**, WG506 (2003) [hep-ph/0307322] (plenary)
45.  *$D^0 - \bar{D}^0$  mixing, CP violation and New Physics*  
Published in AIP Conf. Proc. 698: 456-460, 2004  
Conference on Intersections of Particle and Nuclear Physics, New York City, 2003
46. *Flavor SU(3) and mixing in charmed mesons.*  
5th Workshop on Continuous Advances in QCD, Minneapolis, 2002  
[hep-ph/0209049] (plenary)

47. *Theory of  $D^0 - \bar{D}^0$  mixing.*  
Flavor Physics and CP Violation, Philadelphia, 2002 [hep-ph/0207212] (plenary)
48.  *$SU(3)$  breaking and  $D^0 - \bar{D}^0$  mixing.*  
Workshop on CP Violation, Ann Arbor, 2001
49. *Phenomenology of  $D^0 - \bar{D}^0$  mixing.*  
Frontiers in Contemporary Physics II, Nashville, 2001 (plenary)
50. *Phenomenology of  $D^0 - \bar{D}^0$  mixing or what do we expect now?*  
Workshop on Prospects for CLEO/CESR at  $3 < E < 5$  GeV, Ithaca, 2001
51. *Width difference in the  $D^0 - \bar{D}^0$  system.*  
4th Workshop on Continuous Advances in QCD, Minneapolis, 2000 [hep-ph/0009160]
52. *Physics potential of neutrino factories at Muon Colliders: short baseline.*  
Physics Potential and Development of  $\mu^+\mu^-$  Colliders, San Francisco, 1999,  
[hep-ph/0003026] (plenary)
53. *Final state interactions: from strangeness to beauty.*  
The Chicago Conference on Kaon Physics, Chicago, 1999 [hep-ph/9909312] (plenary)
54. *QCD and electroweak studies at neutrino factories.*  
23 Johns Hopkins Workshop on Current Problems in Particle Theory, Baltimore, 1999
55. *Determination of  $V_{ub}$  from inclusive  $b \rightarrow u\bar{c}s$  decays.*  
 $B$  physics at the Tevatron, FNAL, 1999
56. *Rescattering effects in heavy quark decays.*  
DPF-99 meeting of the American Physical Society, Los Angeles, 1999  
[hep-ph/9903366] (review)
57. *Enhancing  $D^0 - \bar{D}^0$  mixing: from Standard Model to New Physics.*  
Workshop on Physics with the 8+ Photons at Jefferson Lab, Pittsburgh, 1998

## OTHER CONFERENCE PRESENTATIONS

1. *Direct CP asymmetry in  $D \rightarrow \pi\pi$  and  $D \rightarrow KK$  in QCD*  
2017 Meeting of the Division of Particles and Fields (DPF 2017), Fermilab 2017
2. *Role of low-energy observables in precision Higgs analyses*  
*Direct probes of flavor-changing neutral current in  $e^+e^-$  collisions*  
International Conference on High Energy Physics (ICHEP 2016), Chicago, IL 2016
3. *Lifetimes of Heavy Hadrons*  
International Conference on High Energy Physics (ICHEP 2006), Moscow, Russia 2006
4.  *$X(3872)$  in effective field theory*  
PANIC 2005 Conference, Santa Fe, 2005

5. *Lifetimes of heavy hadrons*  
Phenomenology'05 Symposium, Madison, 2005
6.  *$D^0 - \bar{D}^0$  mixing from a dispersion relation*  
Phenomenology'04 Symposium, Madison, 2004
7.  *$SU(3)$  breaking and  $D^0 - \bar{D}^0$  mixing.*  
Phenomenology'02 Symposium, Madison, 2002
8. *Measuring  $V_{ub}$  in  $B$  decays to charm.*  
Phenomenology'99 Symposium, Madison, 1999
9.  *$B_c$  decays in non-relativistic QCD.*  
APS Centennial Meeting (Atlanta, 1999).
10.  *$CP$  violation in charm decays.*  
DPF-99 meeting of the American Physical Society, Los Angeles, 1999
11. *Hybrid charmonium production in NRQCD*  
3rd International Conference on Quark Confinement and Hardon Spectrum, Jefferson Lab, 1998, [hep-ph/9808347]
12. *Final state interactions and new physics in  $B \rightarrow \pi K$  decays.*  
Phenomenology'98 Symposium, Madison, 1998
13. *Long distance effects in radiative  $B \rightarrow \rho\gamma$  decay.*  
BaBar Physics Workshop, Princeton, 1997
14. *Dipenguin-like contributions to  $D^0 - \bar{D}^0$  mixing*  
Seventh International Conference on Hadron Spectroscopy, BNL, 1997 [hep-ph/9712279]

## PARTICIPATION IN OTHER CONFERENCES

1. Beyond the Standard Model Workshop  
(MCTP, University of Michigan, Ann Arbor, 10-12 October 2016)
2. Indirect Searches for New Physics in the LHC and Flavour Precision Era;  
Anticipating 14 TeV: Insight into Matter from the LHC and Beyond  
(Munich Institute for Particle and Astroparticle Physics, 06-07/2015)
3. BSM Higgs Workshop  
(LHC Physics Center, Fermilab, 2014)
4. Causality, Analyticity, and Superluminal Propagation Workshop  
(MCTP, Univ. of Michigan, 2008)
5. LHC Signatures Workshop (MCTP, Univ. of Michigan, 2008) [session chair]
6. Top Quark Symposium (MCTP, Univ. of Michigan, 2005) [session chair]
7. New Ideas in Particle Physics and Cosmology (Philadelphia, 1999)
8. Heavy Quarks at Fixed Target (Fermilab, 1998) [poster presented]
9. Chiral Dynamics Workshop (MIT, 1994).