

## Curriculum Vitae

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### Education

- Universidad Iberoamericana (Mexico), 1976–78  
Biomedical Eng. program (Did not graduate)
- Centro de Investigación y Estudios Avanzados, IPN (Mexico), 1978–80  
M.S. in Physics: June 23, 1980
- Harvard University, 1980–84  
Ph.D. in Physics: June 6, 1984, Advisor: Howard Georgi

### Employment (including Postdoctoral Positions)

- ELPROSA (Mexico City): Electronic Design, May 1977 – Dec 1977
- IPESA (Mexico City): Computer Programming, Dec 1977 – Jun 1978
- U.Iberoamericana (Mexico City): Physics Teacher, Jan 1980 – May 1980
- Harvard University: Teaching Fellow (Physics), Jun 1981 – Jul 1984
- California Institute of Technology: Junior Research Associate,  
Sep 1984 – Aug 1987; Advisors: John Preskill, Mark Wise
- Lawrence Berkeley Laboratories: Postdoctoral Fellow, Sep 1987 – Aug 1988; Advisor: Lawrence Hall
- Fermi National Laboratory: Associate Scientist, Sep 1988 – Aug 1989
- Harvard University: Assistant Professor, Sep 1989 – May 1991
- Harvard University: Associate Professor, Jun 1991 – Dec 1992
- Superconducting Super Collider: Senior Scientist, Sep 1991 – Jan 1994
- Southern Methodist U.: Visiting Adj. Ass. Prof., Feb 1994 – Aug 1994
- University of California, San Diego: Professor, Jul 1994 – present

### Honors, Awards and Prizes

- Whiting Fellow, Harvard, 1981
- Merit Fellow, Harvard, 1983
- Tolman Fellow, California Institute of Technology, 1984
- Milton Fund Award, Harvard, 1989
- Sloan Foundation Fellow, 1990
- Tozier Fund Award, Harvard, 1991
- Clark Fund Award, Harvard, 1991
- ISI's 1120 Most Cited Physicists 1981-June 1997, number 516
- Fellow, American Physical Society, 1998
- 2003 Medal, Mexican Physical Society, Division of Particles and Fields
- Outstanding Referee, American Physical Society, 2008

- Fellow, American Association for the Advancement of Science, 2013
- Outstanding Referee, Physics Letters B, 2014

## Service

- Editorial Boards: Physical Review D, 1995–1998; Physics Letters B, 2005 – 2024; Universe, 2020 – present
- Advisory Board: California Science Project, 2001–2008; Centre for Cosmology and Particle Physics Phenomenology “CP3-origins” (Denmark), 2016–2019
- American Physical Society: DPF Nominating Committee (1999 – 2001); Sakurai Prize Committee, APS, 2006-08 (chair second year); Sakurai Dissertation Award, APS, 2011-12, chair
- HEPAP/NSF Task Force *The scientific value of RSVP*, Feb-June 2005
- Academic Review Committees: Carnegie Mellon U, Physics Department (2008); Mesoamerican Centre for Theoretical Physics (2013)
- Reviewer of Grant Proposals and Panels for NSF, DOE, CRDF, ERC (EU), PPARC, ANPCyT (Argentina), CONACyT (Mexico), UC-MEXUS, ORISE, Germany-Israel Foundation, ANEP, CONICYT (Chile), NSERC (Canada), Netherlands Foundation for Fundamental Research on Matter, Instituto Nazionale di Fisica Nucleare (Italy), Israel Science Foundation and National Natural Science Foundation of China, FAPESP (São Paulo, Brazil), Leverhulme Trust (UK), Italian Ministry for University and Research
- Reviewer for Journals: Physics Letters B, Nuclear Physics B, Physical Review Letters, Physical Review D, Europhysics Letters, Journal of High Energy Physics, Journal of Physics G (Inst. of Phys Publishing), American Journal of Physics, PRAMANA (India), PMC Physics A, Proceedings of the Royal Society of London, Libertas Academica, Open Physics Journal (Bentham), The European Physical Journal C, American Journal of Physics, International Journal of Theoretical Physics, Proceedings of the Royal Society A, Journal of Physics Communications, International Journal of Modern Physics A
- Academic Book Reviews for Cambridge U. Press (General Relativity, Carroll), Prentice Hall (Fishbane/Gasiorowicz/Thornton and Mazur), WHFreeman (Tipler), Wiley (The Sciences, Trefil and Hazen)

## Conference and Symposia Organization

- Convener, XIII Warsaw Symposium on Elementary Particle Physics, Kazimierz, Poland, May, 1990
- Convener, XXVI International Conference on High Energy Physics, Dallas, USA, August, 1992
- Convener, 7th Meeting of the American Physical Society, Division of Particles and Fields, Batavia, USA, November, 1992
- Convener, Workshop on B Physics at Hadron Accelerators, Snowmass, USA, June, 1993
- Local Organizing Committee, The XI International Symposium on Lattice Field Theory, Dallas, USA, October, 1993
- Scientific Advisory Committee, Aspen Winter Physics Conference on Elementary Particle Physics, Aspen, USA, January, 1994
- Local Organizing Committee, 1994 Meeting of the Division of Particles and Fields of the American Physical Society, Albuquerque, USA, to be held August, 1994
- I Latin American Symposium on High Energy Physics, International Advisory Committee, October 30 – November 6, 1996

- BaBar Physics Workshops (Rome, Princeton, Paris, Pasadena) 96–97, co-convener group 9, (Chap 14 of BaBar Physics Book)
- Annual Meeting of the Division of Particles and Fields of the American Physical Society, Local Organizing Committee, Los Angeles, Jan 1999
- Heavy Flavors VIII, Scientific Advisory Committee, Southampton, GB, Jul-Aug 1999
- Nominating Committee, Division of Particles and Fields, American Physical Society, 1999–2002
- Heavy Flavors IX, Local Advisory Committee, CalTech, Pasadena, CA, Jun-Aug 2001
- Annual Meeting of the Division of Particles and Fields of the American Physical Society, Local Organizing Committee, Riverside, 2004
- Local Organizing Committee, CKM 2005: Workshop on the Unitarity Triangle, March 15–18, 2005, San Diego, CA
- Local Organizing Committee, 2nd Meeting of the LHC West Coast Theory Network, May 5, 2006, San Diego, CA
- International Organizing Committee, 5th International Workshop On The CKM Unitarity Triangle, Sep 9-13, 2008, Rome, Italy
- International Advisory Committee, Spring School 2018 ‘Bruno Touschek’, Frascati INFN, Italy
- Organizing Committee, Chair, “Physics of Correlated Electron Materials: A Symposium in Recognition of Professor Maple’s 50 Years at UC San Diego”, San Diego, CA, May 31, 2019.
- International Organizing Committee, Conference on Flavour Physics & CP Violation, May 16 – 18, 2002, Philadelphia, PA; June 3 – 6, 2003, Paris, France; Oct 4 – 9, 2004, Daegu, Korea; April 9 – 12, 2006, Vancouver, Canada; May 12 – 17, 2007, Bled, Slovenia; May 5 – 9, 2008, Taipei, Taiwan; May 27 – June 1, 2009, Lake Placid, NY(USA); May 25 – 29, 2010, Torino, Italy; May 23 – 27, 2011, Kibbutz Maale Hachamisha, Israel; Hefei, Anhui, China, May 21 – 25, 2012; Buzios, Rio, Brazil, May 20 – 24, 2013; Marseille, France, 25 – 30 May 2014; Nagoya, Japan, 25 – 29 May, 2015; Pasadena, CA, 6 – 9 June, 2016; Prague, Czech Republic, 5 – 9 June, 2017; Hyderabad, India, 14 – 18 July 2018; TRIUMF, Victoria, Canada, May 6 – 10, 2019; Santiago de Compostela. Galicia, Spain, (virtual due to COVID), June 8 – 12, 2020; Fudan U, Shanghai, China, June 7 – 11, 2021; U. of Mississippi, May 23 – 27, 2022; Lyon, France, May 29 – June 2, 2023; Bangkok, Thailand, May 27 – 31, 2024; Cincinnati, USA, 2 – 6 June 2025; Bad Honnef, Germany, 2026; Tanjin, Chiana, 2027;
- International Advisory Committee, International Workshop on Hadronic Contributions to New Physics searches (HC2NP), Puerto de la Cruz, Tenerife, Spain, 26 – 30 September, 2016; also Local Organizing Committee, Puerto de la Cruz, Tenerife, Spain 23 – 28 September, 2019; Crete, Greece, 24 – 30 September 2020 (postponed to May 2021, and again -COVID)
- Programme Committee, Rencontres du Vietnam Flavour Physics Conference, Quy Nhon, Vietnam, 2 – 8, August 2020 (suspended-COVID); August 14 – 20, 2022 ;August 17 – 23, 2025

**Bibliography**

## A. Peer Reviewed Journal Articles

1. Alexanian, M. & Grinstein, B. Integral Representation for Non-Planckian Distributions and the Cosmic Background Radiation. *Phys.Rev.Lett.* **44**, 359–361. <http://link.aps.org/doi/10.1103/PhysRevLett.44.359> (Feb. 1980).
2. Alexanian, M. & Grinstein, B. Integral representation for non-maxwell models and the approach to equilibrium. *Physics Letters A* **78**, 209–214. <http://linkinghub.elsevier.com/retrieve/pii/0375960180900699> (Aug. 1980).
3. Grinstein, B. A Supersymmetric SU(5) Gauge Theory with No Gauge Hierarchy Problem. *Nucl.Phys.* **B206**, 387 (1982).
4. Grinstein, B., Polchinski, J. & Wise, M. B.  $W$  and  $Z$  Decays in Low-energy Supersymmetry. *Phys.Lett.* **B130**, 285 (1983).
5. Grinstein, B. Effective Field Theory Calculation Of The Muonic Contribution To The Anomalous Magnetic Moment Of The Electron. *Phys.Lett.* **B134**, 111 (1984).
6. Cohen, A. G., Georgi, H. & Grinstein, B. An Effective Field Theory Calculation of the  $\rho$  Parameter. *Nucl.Phys.* **B232**, 61 (1984).
7. Del Aguila, F. *et al.* Low-energy Models With Two Supersymmetries. *Nucl.Phys.* **B250**, 225 (1985).
8. Dugan, M., Grinstein, B. & Hall, L. J. CP Violation in the Minimal N=1 Supergravity Theory. *Nucl.Phys.* **B255**, 413 (1985).
9. Bijnens, J. & Grinstein, B. Monojets From New Heavy Vector Bosons. *Phys.Lett.* **B156**, 267 (1985).
10. Grinstein, B., Preskill, J. & Wise, M. B. Neutrino Masses and Family Symmetry. *Phys.Lett.* **B159**, 57 (1985).
11. Grinstein, B., Rey, S.-J. & Wise, M. B. CP Violation in Charged Kaon Decay. *Phys.Rev.* **D33**, 1495 (1986).
12. Grinstein, B., Wise, M. B. & Isgur, N. Weak Mixing Angles from Semileptonic Decays Using the Quark Model. *Phys.Rev.Lett.* **56**, 298 (1986).
13. Grinstein, B. & Wise, M. B. Nongaussian Fluctuations and the Correlations of Galaxies or Rich Clusters of Galaxies. *Astrophys.J.* **310**, 19–22 (1986).
14. Goroff, M. *et al.* Coupling of Modes of Cosmological Mass Density Fluctuations. *Astrophys.J.* **311**, 6–14 (1986).
15. Grinstein, B. *et al.* Interpretation of Large Scale Deviations From the Hubble Flow. *Astrophys.J.* **314**, 431–438 (1987).
16. Grinstein, B. & Wise, M. B. Vacuum Energy and Dilaton Tadpole for the Unoriented Closed Bosonic String. *Phys.Rev.* **D35**, 655 (1987).
17. Douglas, M. R. & Grinstein, B. Dilaton Tadpole for the Open Bosonic String. *Phys.Lett.* **B183**, 52 (1987).
18. Grinstein, B. & Wise, M. B. On the Validity of the Zeldovich Approximation. *Astrophys.J.* **320**, 448 (1987).
19. Grinstein, B. & Rohm, R. Dirac and Majorana Spinors on Nonorientable Riemann Surfaces. *Commun.Math.Phys.* **111**, 667 (1987).

20. Allen, T., Grinstein, B. & Wise, M. B. Nongaussian Density Perturbations in Inflationary Cosmologies. *Phys.Lett.* **B197**, 66 (1987).
21. Grinstein, B. & Wise, M. B. Polarization Effects in  $B \rightarrow D^* e \bar{\nu}_e$ . *Phys.Lett.* **B197**, 249 (1987).
22. Grinstein, B., Springer, R. P. & Wise, M. B. Effective Hamiltonian for Weak Radiative B Meson Decay. *Phys.Lett.* **B202**, 138 (1988).
23. Grinstein, B. & Wise, M. B. Weak Radiative B Meson Decay as a Probe of the Higgs Sector. *Phys.Lett.* **B201**, 274 (1988).
24. Grinstein, B., Savage, M. J. & Wise, M. B.  $B \rightarrow X_s e^+ e^-$  in the Six Quark Model. *Nucl.Phys.* **B319**, 271–290 (1989).
25. Grinstein, B., Hall, L. J. & Randall, L. Do B meson decays exclude a light Higgs? *Phys.Lett.* **B211**, 363–369 (1988).
26. Grinstein, B. & Wise, M. B. Light Scalars in Quantum Gravity. *Phys.Lett.* **B212**, 407 (1988).
27. Grinstein, B. & Randall, L. The Renormalization of  $g^2$ . *Phys.Lett.* **B217**, 335 (1989).
28. Chivukula, R. *et al.* Higgs Decay Into Goldstone Bosons. *Annals Phys.* **192**, 93–103 (1989).
29. Grinstein, B. & Hill, C. T. The Trace Anomaly and Low-Energy Phenomenological Implications of Wormholes. *Phys.Lett.* **B220**, 520 (1989).
30. Isgur, N. *et al.* Semileptonic B and D Decays in the Quark Model. *Phys.Rev.* **D39**, 799–818 (1989).
31. Grinstein, B. Charge Quantization of Wormholes and the Finiteness of Newton’s Constant. *Nucl.Phys.* **B321**, 439 (1989).
32. Golden, M. & Grinstein, B. Enhanced CP Violations in Hadronic Charm Decays. *Phys.Lett.* **B222**, 501 (1989).
33. Grinstein, B. & Maharana, J. Vertex Operators for Axionic Wormholes. *Nucl.Phys.* **B333**, 160 (1990).
34. Grinstein, B. Critical Reanalysis of CP Asymmetries in  $B^0$  Decays to CP Eigenstates. *Phys.Lett.* **B229**, 280 (1989).
35. Grinstein, B., Springer, R. P. & Wise, M. B. Strong Interaction Effects in Weak Radiative  $\bar{B}$  Meson Decay. *Nucl.Phys.* **B339**, 269–309 (1990).
36. Grinstein, B., Maharana, J. & Sudarsky, D. All Orders Vertex Operators for Axionic Wormholes. *Nucl.Phys.* **B345**, 231–247 (1990).
37. Grinstein, B. The Static Quark Effective Theory. *Nucl.Phys.* **B339**, 253–268 (1990).
38. Falk, A. F. *et al.* Heavy Meson Form-factors From QCD. *Nucl.Phys.* **B343**, 1–13 (1990).
39. Falk, A. F. & Grinstein, B. Power corrections to leading logs and their application to heavy quark decays. *Phys.Lett.* **B247**, 406–411 (1990).
40. Falk, A. F. & Grinstein, B. Heavy meson pair production in  $e^+e^-$  annihilation from the static quark effective theory. *Phys.Lett.* **B249**, 314–320 (1990).
41. Chay, J., Georgi, H. & Grinstein, B. Lepton energy distributions in heavy meson decays from QCD. *Phys.Lett.* **B247**, 399–405 (1990).

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43. Falk, A. F., Grinstein, B. & Luke, M. E. Leading mass corrections to the heavy quark effective theory. *Nucl.Phys.* **B357**, 185–207 (1991).
44. Dugan, M. J. & Grinstein, B. QCD basis for factorization in decays of heavy mesons. *Phys.Lett.* **B255**, 583–588 (1991).
45. Dugan, M. J. & Grinstein, B. On the vanishing of evanescent operators. *Phys.Lett.* **B256**, 239–244 (1991).
46. Grinstein, B. *et al.* Effective Hamiltonian for nonleptonic  $\bar{B}$  or  $\Lambda_b$  decays to final states with two charmed hadrons. *Nucl.Phys.* **B363**, 19–33 (1991).
47. Grinstein, B. & Wise, M. B. Operator analysis for precision electroweak physics. *Phys.Lett.* **B265**, 326–334 (1991).
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49. Grinstein, B. & Wang, M.-Y. An Effective field theory calculation of the QCD corrections to weak parameters. *Nucl.Phys.* **B377**, 480–500 (1992).
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51. Grinstein, B. Light quark, heavy quark systems. *Ann.Rev.Nucl.Part.Sci.* **42**, 101–145 (1992).
52. Grinstein, B. *et al.* Chiral perturbation theory for  $f_{D_s}/f_D$  and  $B_{B_s}/B_B$ . *Nucl.Phys.* **B380**, 369–376. arXiv: hep-ph/9204207 [hep-ph] (1992).
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54. Cho, P. L. & Grinstein, B. Heavy hadron form-factor relations for  $m_c \neq \infty$  and  $\alpha_s(m_c) \neq 0$ . *Phys.Lett.* **B285**, 153–159. arXiv: hep-ph/9204237 [hep-ph] (1992).
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56. Grinstein, B. & Mende, P. F. On constraints for heavy meson form-factors. *Phys.Lett.* **B299**, 127–132. arXiv: hep-ph/9211216 [hep-ph] (1993).
57. Falk, A. F. & Grinstein, B.  $\bar{B} \rightarrow \bar{K}e^+e^-$  in Chiral Perturbation Theory. *Nucl.Phys.* **B416**, 771–785. arXiv: hep-ph/9306310 [hep-ph] (1994).
58. Grinstein, B., Nir, Y. & Soares, J. M. Constraints on Extended Technicolor Models from  $B \rightarrow \mu^+\mu^-X$ . *Phys.Rev.* **D48**, 3960–3962. arXiv: hep-ph/9307310 [hep-ph] (1993).
59. Grinstein, B. On a Precise Calculation of  $(f_{B_s}/f_B)/(f_{D_s}/f_D)$  and its Implications on the Interpretation of  $B\bar{B}$  Mixing. *Phys.Rev.Lett.* **71**, 3067–3069. arXiv: hep-ph/9308226 [hep-ph] (1993).
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61. Grinstein, B. & Mende, P. F. Form-factors in the heavy quark and chiral limit: Pole dominance in  $\bar{B} \rightarrow \pi e\bar{\nu}$ . *Nucl.Phys.* **B425**, 451–470. arXiv: hep-ph/9401303 [hep-ph] (1994).

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63. Boyd, C. G., Grinstein, B. & Lebed, R. F. Constraints on form-factors for exclusive semileptonic heavy to light meson decays. *Phys.Rev.Lett.* **74**, 4603–4606. arXiv: hep-ph/9412324 [hep-ph] (1995).
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65. Boyd, C. G., Grinstein, B. & Lebed, R. F. Model independent extraction of  $-V(\text{cb})-$  using dispersion relations. *Phys.Lett.* **B353**, 306–312. arXiv: hep-ph/9504235 [hep-ph] (1995).
66. Boyd, C. G., Grinstein, B. & Lebed, R. F. Model independent determinations of  $\bar{B} \rightarrow D\ell, D^*\ell\bar{\nu}$  form-factors. *Nucl.Phys.* **B461**, 493–511. arXiv: hep-ph/9508211 [hep-ph] (1996).
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73. Grinstein, B. & Lebed, R. F. Explicit quark - hadron duality in heavy - light meson weak decays in the 't Hooft model. *Phys.Rev.* **D57**, 1366–1378. arXiv: hep-ph/9708396 [hep-ph] (1998).
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92. Grinstein, B. & Pirjol, D. Subleading corrections to the  $-\text{V}(\text{ub})-$  determination from exclusive B decays. *Phys.Lett.* **B549**, 314–320. arXiv: hep-ph/0209211 [hep-ph] (2002).
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95. Grinstein, B. *et al.* The Photon polarization in  $B \rightarrow X\gamma$  in the standard model. *Phys.Rev.* **D71**, 011504. arXiv: hep-ph/0412019 [hep-ph] (2005).
96. Grinstein, B. & Pirjol, D. Chiral symmetry and exclusive B decays in the SCET. *Phys.Lett.* **B615**, 213–220. arXiv: hep-ph/0501237 [hep-ph] (2005).
97. Arnesen, M. C. *et al.* A Precision model independent determination of  $|V_{ub}|$  from  $B \rightarrow \pi e\nu$ . *Phys.Rev.Lett.* **95**, 071802. arXiv: hep-ph/0504209 [hep-ph] (2005).
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99. Grinstein, B. & Pirjol, D. The CP asymmetry in  $B^0(t) \rightarrow K_S \pi^0 \gamma$  in the standard model. *Phys.Rev.* **D73**, 014013. arXiv: hep-ph/0510104 [hep-ph] (2006).
100. Amanik, P. S., Fuller, G. M. & Grinstein, B. Flavor changing supersymmetry interactions in a supernova. *Astropart.Phys.* **24**, 160–182. arXiv: hep-ph/0407130 [hep-ph] (2005).
101. Cirigliano, V. *et al.* Minimal flavor violation in the lepton sector. *Nucl.Phys.* **B728**, 121–134. arXiv: hep-ph/0507001 [hep-ph] (2005).
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## E. Invited Lectures (Special Advanced Schools and Institutes)

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5. Grinstein, B. A Modern introduction to quarkonium theory. *Int.J.Mod. Phys.* **A15**, 461–496. arXiv: [hep-ph/9811264](https://arxiv.org/abs/hep-ph/9811264) [[hep-ph](#)] (2000).
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