

Dipangkar Dutta

Curriculum Vitae

Mississippi State University
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Academic Appointments

Mississippi State University, Mississippi State, Mississippi

Professor	2016 – Present
Associate Professor	2012 - 2016
Assistant Professor	2006 - 2012

Duke University, Durham, North Carolina

Assistant Research Professor	2003 - 2006
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Massachusetts Institute of Technology, Cambridge, Massachusetts

Senior Postdoctoral Research Associate	2001 - 2002
Postdoctoral Research Associate	1999 - 2001

Education

Northwestern University, Evanston, Illinois

Ph.D. in Physics, *June 1999*

Thesis title: *The $(e, e'p)$ Reaction Mechanism in the Quasi-Elastic Region.*

Thesis Advisors: Dr. Don Geesaman & Prof. Ralph Segel

Indian Institute of Technology, Bombay, India

B.Tech. in Engineering Physics, *May 1992*

Thesis: *Heavy ion scattering cross-sections using a novel region-wise analysis technique.*

Thesis adviser: Prof. Y. K. Gambhir

Honors

Arts & Sciences faculty research award (2020)	Henry Family Dean's Eminent Scholar (2010)
JSA Sabbatical Support Award (2010 & 2015)	Argonne National Lab, Graduate Fellowship (1994-98)

Publications & Presentation

Publications Summary

118 peer reviewed journal articles, with an average of 57 citations per article;

5 most important publications

“Ruling out color transparency in quasielastic $^{12}\text{C}(e,e'p)$ up to Q^2 of 14.2 (GeV/c) 2 ,” D. Bhetuwal *et al.*, Phys. Rev. Lett. **126**, 082301 (2021).

“A small proton charge radius from an electron–proton scattering experiment,” W. Xiong *et al.*, Nature **575**, 7781 (2019).

“Precision measurement of the weak charge of the proton,” D. Androic *et al.*, Nature **557**, 207 (2018).

“Precision Electron-Beam Polarimetry at 1 GeV Using Diamond Microstrip Detectors,” A. Narayan *et al.*, Phys. Rev. X **6**, 011013 (2016).

“Measurement of Nuclear Transparency for the $A(e,e'\pi^+)$ Reaction,” B. Clasie *et al.*, Phys. Rev. Lett. **99**, 242502 (2007).

5 other important publications

A novel comparison of Møller and Compton electron-beam polarimeters, J. A. Magee *et al.*, Phys. Lett. B **766**, 339 (2017).

“A Test of Local Lorentz Invariance with Compton Scattering Asymmetry,” P. Mohanmurthy, A. Narayan and D. Dutta, Mod. Phys. Lett. A **31**, 1650220 (2016).

Color transparency: Past, present and future, D. Dutta, K. Hafidi and M. Strikman, Prog. Part. Nucl. Phys. **69**, 1 (2013).

“Pion-induced Drell-Yan processes and the flavor-dependent EMC effect,” D. Dutta, J-C.Peng, I. Cloet and D. Gaskell, Phys. Rev. C **83**, 042201R (2011).

“Nuclear transparency with the $\gamma n \rightarrow \pi^- p$ process in ^4He , D. Dutta *et al.* Phys. Rev. C **68**, 021001R (2003).

Presentations Summary

47 invited presentations

27 colloquium and seminars

Synergistic Activities

APS Inclusion, Diversity, and Equity Alliance (APS-IDEA), 2020- present

Bridge program with local HBCU, Tougaloo College, 2015- present

Jefferson Lab, User Group Board of Directors, 2013 - 2015

Jefferson Lab, Hall-C Steering Committee, 2009 - 2010, 2018-2021

Jefferson Lab, Hall-A Collaboration Committee, 2010 - 2012

Jefferson Lab, JSA Travel Grant Committee, 2009 - present

Reviewer for Physical Review Letters and Physics Letters B.

Grant Proposal Reviewer for US Department of Energy and National Science Foundation; German National Science Foundation; Research Foundation – Flanders (Belgium); Canada Foundation for Innovation (Canada).

Academic Review Board, MSU 2020 - present

Robert Holland Faculty Senate, MSU 2016 - 2020

Faculty Research Advancement Committee, MSU 2019 - 2020

Student Awards

Edward Leggett - Honors Undergraduate Research Fellowship (2008)

Prajwal Mohanmurthy - Honors Undergraduate Research Fellowship (2010, 2011); Clinton E. Wallace Student Excellence Undergraduate Research Award (2011)

Prajwal Mohanmurthy - Jefferson Science Associates, Undergraduate Research Award (2012), SPS Herbert Levy Memorial Scholarship (2012)

John Madsen - Honors Research Fellowship (Summer 2013, 2014)

John Madsen - NEMDJ Undergraduate Research Award (2013)

John Madsen - Goldwater Scholarship, honorable mention (2015)

Nic Ezzel - Goldwater Scholarship (2018).

Reese Dunne - Fulbright Fellowship (2020), Goldwater Scholarship (2021).