

IDENTIFYING INFORMATION:

NAME: Narayan, Abhay Pasupathy

PERSISTENT IDENTIFIER (PID): <https://orcid.org/0000-0002-2744-0634>

POSITION TITLE: Professor of Physics

PRIMARY ORGANIZATION AND LOCATION: Columbia University, New York, New York, United States

Professional Preparation:

ORGANIZATION AND LOCATION	DEGREE (if applicable)	RECEIPT DATE	FIELD OF STUDY
Princeton University, Princeton, New Jersey, United States	Postdoctoral Fellow	08/2005 - 12/2008	Postdoctoral work
Cornell University, Ithaca, New York, United States	PHD	08/1998 - 08/2004	Physics
Indian Institute of Technology, Kanpur, Not Applicable, N/A, India	MS	08/1993 - 07/1998	Physics

Appointments and Positions

2020 - present Professor of Physics, Columbia University, New York, New York, United States
 2019 - present Scientist, Brookhaven National Laboratory, Upton, New York, United States
 2014 - 2019 Associate Professor of Physics, Columbia University, New York, New York, United States
 2009 - 2014 Assistant Professor of Physics, Columbia University, New York, New York, United States

Products

1. Keren I, Webb TA, Zhang S, Xu J, Sun D, Kim BSY, Shin D, Zhang SS, Zhang J, Pereira G, Yao J, Okugawa T, Michael MH, Viñas Boström E, Edgar JH, Wolf S, Julian M, Prasankumar RP, Miyagawa K, Kanoda K, Gu G, Cothrine M, Mandrus D, Buzzi M, Cavalleri A, Dean CR, Kennes DM, Millis AJ, Li Q, Sentef MA, Rubio A, Pasupathy AN, Basov DN. Cavity-altered superconductivity. Nature. 2026 Feb;650(8103):864-868. PubMed Central PMCID: [PMC12935536](https://pubmed.ncbi.nlm.nih.gov/PMC12935536/).
2. Thinel M, Handa T, Koay CS, Chica DG, Olsen N, Jindal A, Choe J, Roy X, Zhu X, Pasupathy AN. Anderson Localization in a Two-Dimensional Metal. Phys Rev Lett. 2026 Mar 6;136(9):096401. PubMed PMID: [41861318](https://pubmed.ncbi.nlm.nih.gov/41861318/).
3. Sobral JA, Obernauer S, Turkel S, Pasupathy AN, Scheurer MS. Machine learning the microscopic form of nematic order in twisted double-bilayer graphene. Nat Commun. 2023 Aug 17;14(1):5012. PubMed Central PMCID: [PMC10435506](https://pubmed.ncbi.nlm.nih.gov/PMC10435506/).
4. Wu X, Darlington TP, Holbrook MA, Yanev ES, Holtzman LN, Xu X, Hone JC, Basov DN, Schuck PJ, Pasupathy AN. Optical Band Engineering of Monolayer WSe2 in a Scanning Tunneling Microscope. arXiv:2411.01010. 2024 December 10.

5. Guo Y, Pack J, Swann J, Holtzman L, Cothrine M, Watanabe K, Taniguchi T, Mandrus DG, Barmak K, Hone J, Millis AJ, Pasupathy A, Dean CR. Superconductivity in 5.0° twisted bilayer WSe₂. Nature. 2025 Jan;637(8047):839-845. PubMed PMID: [39843588](#).
6. Posey VA, Turkel S, Rezaee M, Devarakonda A, Kundu AK, Ong CS, Thinel M, Chica DG, Vitalone RA, Jing R, Xu S, Needell DR, Meirzadeh E, Feuer ML, Jindal A, Cui X, Valla T, Thunström P, Yilmaz T, Vescovo E, Graf D, Zhu X, Scheie A, May AF, Eriksson O, Basov DN, Dean CR, Rubio A, Kim P, Ziebel ME, Millis AJ, Pasupathy AN, Roy X. Two-dimensional heavy fermions in the van der Waals metal CeSiI. Nature. 2024 Jan;625(7995):483-488. PubMed PMID: [38233620](#).
7. Jindal A, Saha A, Li Z, Taniguchi T, Watanabe K, Hone JC, Birol T, Fernandes RM, Dean CR, Pasupathy AN, Rhodes DA. Coupled ferroelectricity and superconductivity in bilayer T(d)-MoTe₂. Nature. 2023 Jan;613(7942):48-52. PubMed PMID: [36600069](#).
8. Zhao H, Blackwell R, Thinel M, Handa T, Ishida S, Zhu X, Iyo A, Eisaki H, Pasupathy AN, Fujita K. Smectic pair-density-wave order in EuRbFe(4)As(4). Nature. 2023 Jun;618(7967):940-945. PubMed PMID: [37380689](#).
9. Turkel S, Swann J, Zhu Z, Christos M, Watanabe K, Taniguchi T, Sachdev S, Scheurer MS, Kaxiras E, Dean CR, Pasupathy AN. Orderly disorder in magic-angle twisted trilayer graphene. Science. 2022 Apr 8;376(6589):193-199. PubMed PMID: [35389784](#).
10. McGilly LJ, Kerelsky A, Finney NR, Shapovalov K, Shih EM, Ghiotto A, Zeng Y, Moore SL, Wu W, Bai Y, Watanabe K, Taniguchi T, Stengel M, Zhou L, Hone J, Zhu X, Basov DN, Dean C, Dreyer CE, Pasupathy AN. Visualization of moiré superlattices. Nat Nanotechnol. 2020 Jul;15(7):580-584. PubMed PMID: [32572229](#).

Certification:

I understand that I have been designated as a covered individual by the Federal funding agency.

I certify to the best of my knowledge and belief that the information contained in this Biographical Sketch Form is true, complete, and accurate. I understand that any false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (18 U.S.C. §§ 1001 and 287, and 31 U.S.C. 3729-3733 and 3801-3812). I further understand and agree that (1) the statements and representations made herein are material to DOE's funding decision, and (2) I have a responsibility to update the disclosures during the project period of the award should circumstances change which impact the responses provided above.

I also certify that, at the time of submission, I am not a party in a malign foreign talent recruitment program. I further understand should I take action to involve myself with a Malign Foreign Talent Recruitment Program during the period of performance of the award, I must notify the recipient's Authorized Agent immediately, but no later than five business days of taking such action and immediately recuse myself from all DOE awards.

Certified by Narayan, Abhay Pasupathy in SciENCv on 2026-03-22 18:17:55