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DEEPAK A. CHERIAN

Education

- 2016: Ph.D., MIT-WHOI Joint Program in Oceanography, Physical Oceanography Dissertation: When an eddy encounters shelf-slope topography.
- 2010: M.Tech., Ocean Engineering & Naval Architecture, Indian Institute of Technology, Kharagpur.
- 2010: B.Tech. (Hons.), Ocean Engineering & Naval Architecture, Indian Institute of Technology, Kharagpur.

Positions

2019 Mar – present: Postdoctoral Fellow, National Center for Atmospheric Research
2017 Jan – 2019 Mar: Research Associate (Post-Doc), Oregon State University
2016 Sep – 2017 Jan: Postdoctoral Investigator, Woods Hole Oceanographic Institution
2010–2016: Graduate research assistant, Massachusetts Institute of Technology
& Woods Hole Oceanographic Institution

Articles

- Cherian, D.A., Shroyer, E.L., Wijesekera, H.W. and Moum, J.N. (submitted). "Shelf flows forced by deep-ocean anticyclonic eddies at the shelfbreak".

 Journal of Physical Oceanography.
- Cherian, D.A. and Brink, K.H. (2018). "Shelf flows forced by deep-ocean anticyclonic eddies at the shelfbreak". Journal of Physical Oceanography. 48 (5): 1117-1138
- Cherian, D.A. and Brink, K.H. (2016) "Offshore Transport of Shelf Water by Deep-Ocean Eddies.", Journal of Physical Oceanography 46 (12): 3599–3621
- Brink, K.H. and Cherian, D.A. (2013) "Instability of an idealized tidal mixing front: Symmetric instabilities and frictional effects."

 Journal of Marine Research 71 (6): 425–450.
- Haine, T.W.N. and Cherian, D.A. (2013) "Analogies of Ocean/Atmosphere Rotating Fluid Dynamics with Gyroscopes: Teaching Opportunities."

 Bull. Amer. Meteor. Soc. 94: 673–684.
- Cherian, D.A., Farrar, J.T. and Durland, T.S. (in prep., available on request)

 "The upper-ocean vertical structure of 7-day period inertial-gravity waves in the equatorial Pacific."

2019-2022 NASA Physical Oceanography, lead-PI, \$483k **Funding** Co-Is: Emily Shroyer (OSU), Jonathan Nash (OSU) "Relating SSHA-derived Eddy Diffusivity to In-situ Estimates from Microstructure and ECCO." Invited Talks 2019 Jun: "When an eddy meets shelf-slope topography." Gordon Research Conference, Coastal Ocean Dynamics. "The seasonal cycle of upper-ocean mixing in the Bay of Bengal" — presented at Talks & 2019: Oregon State University, CEOAS seminar **Posters** 2018: (poster) Gordon Research Conference, Ocean Mixing (talk) AGU Ocean Sciences Meeting, 2018 - Portland "Shelf flows forced by mesoscale eddies at the shelfbreak" — presented at 2017: (poster) Gordon Research Seminar and Conference - Coastal Ocean Dynamics "Offshore export of shelf water by deep-ocean eddies" — presented at 2017 : National Taiwan University Oregon State University, CEOAS seminar 2016: Indian Institute of Science (talk) AGU Ocean Sciences Meeting, 2016 - New Orleans "Arresting an eddy's cross-isobath translation" — presented at 2016: Oregon State University, CEOAS seminar Massachusetts Insitute of Technology, Sack Lunch Seminar 2015: (talk, poster) Gordon Research Conference and Seminar, Coastal Ocean Modeling 2017 Winter Term: Guest Lecture for "Geophysical Waves", **Teaching** (graduate level course), Oregon State University 2014 Fall semester: Teaching Assistant, "Observational Physical Oceanography" (graduate level course), Massachusetts Institute of Technology. 2013 Jan: Lecturer, Four lectures on "Physical Oceanography", WHOI Winter Semester for Undergraduates (aimed at students from liberal arts colleges). 2012 Jan: Teaching Assistant, "Physical Oceanography", WHOI - British Petroleum course.

& Service Journal of Marine Research and Journal of Physical Oceanography. Conducted rotating tank lab demonstrations for broad audience (public, scientists, students — graduate and K-12) at WHOI GFD Open Days, 2013. Additional 2014 Coastal and Estuarine Field Methods Summer School, Woods Hole Oceanographic Institution **Training** 2013 Teaching Certificate Program, Massachusetts Institute of Technology 2012 Estuarine and Coastal Fluid Dynamics Summer School, University of Washington Friday Harbor Laboratories 2010 Institute Silver Medal, Indian Institute of Technology, Kharagpur **Awards** for exceptional academic performance in department. 2008 Hem Raut Award, Indian Institute of Technology, Kharagpur for exceptional academic performance in department. 2018 Sep: R/V Thomas G. Thompson, Western Pacific. PI: Jim Moum (OSU) **Fieldwork** 2017 Feb: R/V Roger Revelle, South China Sea. PI: Lou St-Laurent (WHOI) 2014 July: R/V Tioga, off Martha's Vineyard. (student-run cruise for summer school) PI: Deepak Cherian, Jonathan Fincke, Cara Manning (WHOI). 2013 Nov: R/V Roger Revelle, Bay of Bengal. PI: Emily Shroyer (OSU) 2011 July: SSV Corwith Cramer, Middle Atlantic Bight. PI: Donglai Gong (WHOI) Software Core developer of python package xarray. Prof. Emily Shroyer (OSU, postdoctoral advisor) References Prof. James Moum (OSU, postdoctoral co-advisor) Dr. Kenneth Brink (WHOI, thesis advisor) Dr. Steve Lentz (WHOI, thesis committee member) Prof. James Yoder (URI, teaching reference)

Reviewer for Geophysical Research Letters, Journal of Geophysical Research - Oceans,

Outreach