

Curriculum vitae

Name: J.J.M. (Hans) van Haren
Present Employer: Royal Netherlands Institute for Sea Research (NIOZ)
Present Function: Senior Scientist Physical Oceanography
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Date, place birth 31-12-1959, Utrecht
Higher education August 1985 MSc Geophysics, State University of Utrecht (NL)
02 May 1990 PhD Geophysics--Physical Oceanography, State University Utrecht (NL)

Affiliations

1983-1984 Student assistant at the State University of Utrecht teaching experimental physics to undergraduate Medicine students.
1985-1990 PhD study at NIOZ Texel (funded by ZWO, now NWO).
1990-1990 Four months post-doctoral fellowship at the Dalhousie University, Halifax Canada (funded by NSER Canada and ONR, USA), C. Garrett & N. Oakey.
1991-1991 Twelve months post-doctoral fellowship at the University of Victoria, Canada (funded by NSERC and ONR), C. Garrett.
1992-1996 Post-doctoral fellowship at NIOZ Texel (funded by NWO).
1996-1998 Junior scientist at NIOZ Texel
1998- Senior scientist at NIOZ Texel

Funded research proposals

1994 NWO-middle large (0.9 Mfl) oceanographical equipment budget (with C. Veth and H. Lindeboom).
1998 NWO-middle large (1.5 Mfl) oceanographical equipment budget.
1998-2001 EC-MAST III "PROVESS" (coordinator J. Howarth, POL, UK). NIOZ-partner.
1999-2004 GOA-NWO funded "PROCS" –Faroe-Shetland Channel. Physics coordinator (overall coordinator H. Ridderinkhof).
2004-2008 NWO funded large investment "LOCO" Internal waves part. (main applicants H. van Aken; H. Ridderinkhof).
2004-2007 NWO-CLIVAR funded "CLIMA-DIM".
2004-2006 NWO and CNRS partially funded "GYROSCOP".
2005-2006 NWO, NERC funded "Slope-mixing".
2006-2009 BSIK funded "CS-1:North-Atlantic Ocean Monitoring and modelling: subproject 3: Observations on the internal wave climatology in the North Atlantic Ocean" (coordinator H. Ridderinkhof).
2009-2017 Oceanography part of KM3NeT (dutch contribution to cubic kilometre neutrino telescope); NWO-Large Facilities (ESFRI-funding). Coordinator M. de Jong (Nikhef).
2018-2023 Oceanography part of KM3NeT2.0 (dutch contribution to cubic kilometre neutrino telescope); NWO-Large Facilities (Dutch Roadmap). Coordinator A. Heijboer (Nikhef).

Post-Docs and PhD-students

1999-2000 J. Gemmrich Post-Doc Marie-Curie fellowship and PROVESS
2000-2004 P. Hosegood PhD-student PROCS (graduation: cum laude)
2004-2007 T. Gerkema Post-Doc CLIMA-DIM
2007-2008 L. Gostiaux Post-Doc BSIK: IW-monitoring

- 2009-2016 A. Rabitti PhD-student (co-supervisors L. Maas, T. Gerkema): equatorial dynamics
 2013-2016 A. Cimadoribus Post-Doc Internal wave dynamics
 2014-2015 F. Cyr Post-Doc Post-Doc Internal wave turbulence

Instrument and techniques development

- 1992 Internal wave band fluxes from ADCP and thermistor string (with C. Garrett and N. Oakey)
 1996 mixBB ADCP bottomlander (with E. Bos and L. Boom)
 1996-1998 NIOZ-1 Fast thermistor string (with R. Groenewegen, M. Laan and B. Koster)
 2004 mix-2 ADCP bottomlander (with L. Boom and H. de Porto)
 2001-2004 NIOZ-2 High sampling rate thermistor string (with R. Groenewegen, M. Laan and B. Koster)
 2005-2006 NIOZ-3 High sampling rate thermistor string (with M. Laan and D.-J. Buisman)
 2009-2013 NIOZ-4,5 High sampling rate thermistor string (with M. Laan, L. Gostiaux and D.-J. Buisman)
 2009-2014 Mooring deployment techniques LOM and LOEI (with T. Hillebrand, J. van Heerwaarden, A. Smit, R. Bakker, M. Laan, L. Gostiaux, R. Groenewegen and H. Boer-Rookhuizen)
 2011-2015 Multiple thermistor string mooring (with J. van Heerwaarden, R. Bakker, M. Laan, NIOZ-MTM)
 2018-2021 3D-45 lines thermistor string mooring (with R. Bakker, Y. Witte, M. Laan, J. van Heerwaarden, NIOZ-NMF)

Oceanographic sea going experience

- 1981 3-weeks cruise central North Sea (student participant, Central North Sea Project)
 1985 8 1-week cruises North Sea (chief scientist, Frisian Front Project)
 1986 7 1-week cruises North Sea (chief scientist, Frisian Front Project)
 1990 2-weeks cruise Scotian Shelf Canada (post-doc, Emerald Basin Experiment)
 1992 2-days cruise Arabian Sea (lecturer, UNESCO training course)
 1992-95 23 1-week cruises North Sea (chief scientist, Integrated North Sea Programme)
 1996 4-weeks cruise Bay of Biscay (senior scientist, TripleB)
 1998 3-weeks cruise Northern North Sea (chief scientist, PROVESS)
 1999 2-weeks cruise Southern North Sea (chief scientist, PROVESS)
 1999 4-weeks cruise Faroe-Shetland Channel (chief scientist, PROCS)
 2002 2 1-week cruises Rockall Basin (eastern North-Atlantic) (chief scientist, ROCS)
 2003 2-weeks cruise Canary Basin (eastern North-Atlantic) (chief scientist, LOCO-IW)
 2003 1-week cruise Western Mediterranean Sea (chief scientist, GYROSCOP)
 2004 1-week cruise Western Mediterranean Sea (senior scientist, GYROSCOP)
 2004 3-weeks cruise Canary Basin (eastern North-Atlantic) (chief scientist, LOCO-IW)
 2005 1-week cruise Western Mediterranean Sea (senior scientist, GYROSCOP)
 2005 1-week cruise Bay of Biscay (chief scientist, Towed ADCP)
 2005 3-weeks cruise Faeroe-Shetland Channel (senior scientist, Slope Mixing)
 2006 1-week cruise Western Mediterranean Sea (chief scientist, GYROSCOP)
 2006 4-weeks cruise Canary/Cape Verdes Basin (chief scientist, LOCO-IW)
 2007 4-weeks cruise Canary/Cape Verdes/Brazil Basin (chief scientist, bsik/LOCO-IW)
 2008 1-week cruise Kimberley, north-West Australia (senior scientist, WAMSI/UWA)
 2009 4-weeks cruise Canary/Brazil Basin (chief scientist, bsik/LOCO-IW)
 2009 1-week cruise Ionian Sea, East-Mediterranean (chief scientist, Nikhef)
 2010 2-weeks cruise Baltic (senior scientist, IOW)
 2011 2-weeks cruise Ionian Sea, East-Mediterranean (chief scientist, Nikhef)
 2011 1-week cruise Ebro canyon, Western Mediterranean Sea (senior scientist, ICM-CSIC)
 2012 1-week cruise off Portugal, NE-Atlantic Ocean (chief scientist)

- 2013 3-week cruise Mediterranean and NE-Atlantic Ocean (chief scientist, Nikhef)
- 2013 2 1-week cruises off Portugal, NE-Atlantic Ocean (chief scientist)
- 2013 1-week cruise Puerto Rico Trench, NW-Atlantic Ocean (chief scientist)
- 2014 1-week cruise Mediterranean Sea (chief scientist, Nikhef)
- 2014 1-week cruise off Portugal, NE-Atlantic Ocean (chief scientist)
- 2015 2-weeks cruise Puerto Rico Trench, NW-Atlantic Ocean (chief scientist)
- 2015 2 1-week cruises off Portugal, NE-Atlantic Ocean (chief scientist)
- 2016 6-weeks cruise West Pacific, Mariana Trench (senior scientist)
- 2017 1-week cruise West Pacific, off Taiwan (senior scientist)
- 2017 1-day cruise Lake Garda-I (senior scientist)
- 2017 1-day cruise KM3NeT/ANTARES, off Toulon-F (chief scientist)
- 2018 1-week cruise West Pacific, off Taiwan (senior scientist)
- 2018 1-day cruise Lake Garda-I (senior scientist)
- 2018 1-day cruise KM3NeT/ANTARES, off Toulon-F (chief scientist)
- 2018 2-weeks cruise West Pacific, Mariana Trench (chief scientist)
- 2019 2-weeks cruise off Portugal, NE-Atlantic Ocean (chief scientist)
- 2019 3-weeks cruise N-Atlantic Ocean (chief scientist)
- 2019 1-week cruise off S-California, NE-Pacific (senior scientist)
- 2019 1-week cruise Mariana Trench, W-Pacific (chief scientist)
- 2019 1-week cruise off S-California, NE-Pacific (senior scientist)
- 2020 1-week cruise West-Mediterranean (chief scientist)
- 2020 3-day cruise West-Mediterranean (senior scientist)
- 2024 1-week cruise West-Mediterranean (chief scientist)

Miscellaneous

- 1980-1981 Member of the advisory board of the sub-faculty of Physics & Astronomy, State University of Utrecht.
- 1982-1983 Member of the board of the department of Meteorology & Physical Oceanography of the State University of Utrecht.
- 1985-1986 Project manager of the Frisian Front Project (physics part).
- 1986-1989 Member of the working group "currents and tides" of the Dutch Board of Consultation for oceanographic research (RvO).
- 1992 UNESCO lecturer at a training course on the measurement of currents, Doha, Qatar.
- 1993 Organizer of the NIOZ student course on "practical physical oceanography".
- 1992-1995 Project manager of the Integrated North Sea Programme and holder of the associated large equipment investment budget.
- 1996 Lecturer short course on "Gebruik BB-ADCP" (Use of Broadband ADCP), Rijkswaterstaat, dir. N-Holland.
- 2000 NEBROC course. Basic course in marine sciences, NIOZ, Texel, 02-13 October.
- 2001 Monitoring- and Evaluation Programme Near-Shore Windpark (MEP-NSW). Expert meeting on waves and currents. NOVEM, Utrecht, 11 May.
- 2001 Co-convenor 26th General Assembly EGS session OA4 'Processes of vertical exchange in shelf seas' (PROVCESS), Nice, France.
- 2002 Guest-editor J. Sea Research special issue on 'Processes of vertical exchange in shelf seas' (PROVCESS), part I and part II.
- 2002 Convenor 27th General Assembly EGS session OA4 'Internal waves in deep ocean and shelf seas', Nice, France.
- 2003 Convenor Joint Assembly EGU session OS3 'Small and meso-scale processes and their impact on the large scale', Nice, France.
- 2004-2009 Member editorial board Journal of Sea Research.
- 2004 Convenor EGU 1st General Assembly session OS3 'Small and meso-scale processes and their impact on the large scale', Nice, France.

- 2004 Guest-editor Deep-Sea Research II special issue on ‘Small and meso-scale processes and their impact on the large scale’.
- 2004 15-days visiting travel grant Japan Society for the Promotion of Science, Japan (University of Tokyo)
- 2004-2010 Topic editor (member editorial board) Ocean Science
- 2005 External examiner PhD-thesis Rune Yttervik, NTNU Trondheim, Norway.
- 2005 3-months visiting fellowship ‘Poste Rouge’ CNRS, France (Ifremer, La Seyne sur mer)
- 2006 Co-convenor AGU 13th Ocean Sciences Meeting session ‘Ocean mixing’, Honolulu, Hawaii, USA.
- 2007 Co-convenor 39th International Liège colloquium on ocean dynamics, topic ‘Turbulence and Waves’, Liège, Belgium.
- 2008 4-months visiting fellowship Institute for Advanced Studies, Australia (University of Western Australia, Perth)
- 2008-2009-2010 Member Institutional Board ANTARES neutrino telescope.
- 2009- Associate editor Journal of Sea Research.
- 2009- Member Strategic Planning Board of the cubic kilometer neutrino telescope KM3NeT.
- 2010 Lectures in autumn-school on ‘Topographic Internal Waves’, Corsica, France.
- 2013 1-month visiting professor École Centrale de Lyon, France.
- 2014 1-month visiting professor École Centrale de Lyon, France.
- 2015-2019 Member executive committee IAPSO--International Organization for the Physical Sciences of the Oceans.
- 2018-2022 Member Geschäftsstelle des Gutachterpanels Forschungsschiffe (GPF) of the Deutsche Forschungsgemeinschaft.
- 2018-2022 Specialty Chief Editor Frontiers in Physical Oceanography of Frontiers in Earth Science and Frontiers of Marine Science.
- 2019-2023 Vice-president executive committee.
- 2023- President executive committee IAPSO.
- 2023- Member executive committee SCOR—Scientific Committee on Oceanic Research

Refereed publications

- Maas, L.R.M., J.J.M. van Haren, 1987. Observations on the vertical structure of tidal and inertial currents in the central North Sea. *J. Mar. Res.*, 45, 293-318.
- van Haren, J.J.M., L.R.M. Maas, 1987. Temperature and current fluctuations due to tidal advection of a front. *Neth. J. Sea Res.*, 21, 79-94.
- Bosveld, F.C., J.J.M. van Haren, F.G.J. Absil, 1989. The measurement of $\langle U \rangle$, $\langle V \rangle$ and $\langle uv \rangle$ inside the turbulent spot using conditionally sampled hot-wire anemometer signals. *Appl. Sci. Res.*, 46, 291-307.
- van Haren, J.J.M., 1990. Observations on the structure of currents at tidal and sub-tidal frequencies in the central North Sea. PhD thesis, State University of Utrecht, 102 pp
- van Haren, J.J.M., 1990. Sub-tidal dynamics of a near-coastal zone in the North Sea. *Neth. J. Sea Res.*, 25, 31-44.
- van Haren, J.J.M., J.C.A. Joordens, 1990. Observations of physical and biological parameters at the transition between the southern and central North Sea. *Neth. J. Sea Res.*, 25, 351-364.
- van Haren, J.J.M., 1990. Observations on the horizontal and vertical structure of currents at sub-tidal frequencies in the central North Sea. *Neth. J. Sea Res.*, 27, 1-23.
- van Haren, H., N. Oakey, C. Garrett, 1994. Measurements of internal wave band eddy fluxes above a sloping bottom. *J. Mar. Res.*, 52, 909-946.
- van Haren, H., 1996. Correcting false thermistor string data. *Cont. Shelf Res.*, 16, 1871-1883

- Ruardij, P., H. van Haren, H. Ridderinkhof, 1997. The impact of thermal stratification on phytoplankton and nutrient dynamics in shelf seas: a model study. *J. Sea Res.*, 38, 311-331.
- van Haren, H., P. Ruardij, H. Ridderinkhof, D. Mills, 1997. The Integrated North Sea Programme (INP). *In* J.H. Stel et al. (eds). *Operational oceanography, the challenge for European cooperation*. Proceedings of the first Intl. conf. on EuroGOOS, Elsevier, Amsterdam, 529-538.
- van Raaphorst, W., H. Malschaert, H. van Haren, 1998. Tidal resuspension and deposition of particulate matter in the Oyster Ground, North Sea. *J. Mar. Res.*, 56, 257-291.
- van Haren, H., D.K. Mills, L.P.M.J. Wetsteyn, 1998. Detailed observations of the phytoplankton spring bloom in the stratifying central North Sea. *J. Mar. Res.*, 56, 655-680.
- van Haren, H., L. Maas, J.T.F. Zimmerman, H. Ridderinkhof and H. Malschaert, 1999. Strong inertial currents and marginal internal wave stability in the central North Sea. *Geophys. Res. Lett.*, 26, 2993-2996.
- van Haren, H. 2000. Properties of vertical current shear across stratification in the central North Sea. *J. Mar. Res.*, 58, 465-491.
- van Haren, H. 2000. Comment on 'An efficient method for determining the significance of covariance estimates'. *J. Atmos. Oceanic Technol.*, 17, 885-886.
- van Raaphorst, W., H. Malschaert, H. van Haren, W. Boer and G.-J. Brummer, 2001. Across-slope zonation of erosion and deposition in the Faeroe-Shetland Channel, North Atlantic Ocean. *Deep-Sea Res. I*, 48, 567-591.
- van Haren, H., R. Groenewegen, M. Laan and B. Koster, 2001. A fast and accurate thermistor string. *J. Atmos. Oceanic Technol.*, 18, 256-265.
- van Haren, H. 2001. Estimates of sea level, waves and winds from a bottom-mounted ADCP in a shelf sea. *J. Sea Res.*, 45, 1-14.
- Gemmrich, J.R. and H. van Haren, 2001. Thermal fronts generated by internal waves propagating obliquely along the continental slope. *J. Phys. Oceanogr.*, 31, 649-655.
- Gemmrich, J.R. and H. van Haren, 2002. Internal wave band eddy fluxes in the bottom boundary layer above a continental slope. *J. Mar. Res.*, 60, 227-253.
- Howarth, M.J., J.H. Simpson, J. Sündermann and H. van Haren, 2002. Processes of Vertical Exchange in Shelf Seas (PROVESH). *J. Sea Res.*, 47, 199-208.
- Gemmrich, J. and H. van Haren, 2002. Internal wave band kinetic energy production: flat vs sloping bottom. *J. Sea Res.*, 47, 209-222.
- van Haren, H., L. Maas and H. van Aken, 2002. On the nature of internal wave spectra near a continental slope. *Geophys. Res. Lett.*, 29(12), 1615, doi:10.1029/2001GL014341.
- Bonnin, J., W. van Raaphorst, G.-J. Brummer, H. van Haren, and H. Malschaert. 2002. Intense mid-slope resuspension of particulate matter in the Faeroe-Shetland Channel; short-term deployment of near-bottom sediment traps. *Deep-Sea Res. I*, 49, 1485-1505.
- Ridderinkhof, H., H. van Haren, F. Eijgenraam and T. Hillebrand, 2002. Ferry observations on temperature, salinity and currents in the Marsdiep tidal inlet between the North Sea and Wadden Sea. *In* N.C. Flemming et al. (eds). *Operational oceanography: implementation at the European and regional scales*. Proc. 2nd Intl. conf. on EuroGOOS, Elsevier, Amsterdam, 139-147.
- van Haren, H., M.J. Howarth, K. Jones and I. Ezzi, 2003. Autumnal reduction of stratification in the northern North Sea and its impact. *Cont. Shelf Res.*, 23, 177-191.
- Hosegood, P. and H. van Haren. 2003. Ekman-induced turbulence over the continental slope in the Faeroe-Shetland Channel as inferred from spikes in current meter observations. *Deep-Sea Res. I*, 50, 657-680.
- van Haren, H., L. Maas and H. van Aken, 2003. Correction to "On the nature of internal wave spectra near a continental slope". *Geophys. Res. Lett.*, 30(7), 1379, doi:10.1029/2003GL016952.

- van Haren, H. 2003. On the polarization of oscillatory currents in the Bay of Biscay. *J. Geophys. res.*, 108(C9), 3290, doi:10.1029/2002JC001736.
- van Haren, H. and C. Millot, 2003. Seasonality of internal gravity waves kinetic energy spectra in the Ligurian Basin. *Oceanol. Acta*, 26, 635-644.
- van Haren, H. 2004. Spectra of poorly resolved ocean data. *Ocean Dyn.*, 54, 49-53.
- van Haren, H. 2004. Current spectra under varying stratification conditions in the central North Sea. *J. Sea Res.*, 51, 77-91.
- van Haren, H. 2004. Incoherent internal tidal currents in the deep-ocean. *Ocean Dyn.*, 54, 66-76.
- van Haren, H. 2004. Bandwidth similarity at inertial and tidal frequencies in kinetic energy spectra from the Bay of Biscay. *Deep-Sea Res. I*, 51, 637-652.
- van Haren, H. and M.J. Howarth. 2004. Enhanced stability during reduction of stratification in the North Sea. *Cont. Shelf Res.*, 24, 805-819.
- van Haren, H. 2004. Some observations of non-linearly modified internal wave spectra. *J. Geophys. Res.*, 109, C03045, doi:10.1029/2003JC002136.
- Hosegood, P., J. Bonnin and H. van Haren. 2004. Solibore-induced sediment resuspension in the Faeroe-Shetland Channel. *Geophys. Res. Lett.*, 31, L09301, doi:10.1029/2004GL019544.
- van Haren, H. and C. Millot, 2004. Rectilinear and circular inertial motions in the Western Mediterranean Sea. *Deep-Sea Res. I*, 51(11), 1441-1455.
- van Haren, H., L. St Laurent and D. Marshall. 2004. Small and mesoscale processes and their impact on the larger scale. *Deep-Sea Res. II*, 51, 2883-2887.
- Hosegood, P. and H. van Haren. 2004. Near-bed solibores over the continental slope in the Faeroe-Shetland Channel. *Deep-Sea Res. II*, 51, 2943-2971.
- van Haren, H. 2004. Spatial variability of deep-ocean motions above an abyssal plain. *J. Geophys. Res.*, 109, C12014, doi:10.1029/2004JC002558.
- van Haren, H. 2005. Sharp near-equatorial transitions in inertial motions and deep-ocean step-formation. *Geophys. Res. Lett.*, 32, L01605, doi:10.1029/2004GL021630.
- van Haren, H. 2005. Internal waves near the buoyancy frequency in a narrow wave-guide. *J. Sea Res.*, 53, 121-129.
- van Haren, H., 2005. Details of stratification in a sloping bottom boundary layer of Great Meteor Seamount. *Geophys. Res. Lett.*, 32, L07606, doi:10.1029/2004GL02298.
- van Haren, H., R. Groenewegen, M. Laan and B. Koster, 2005. High sampling rate thermistor string observations at the slope of Great Meteor Seamount. *Ocean Science*, 1, 17-28, SRef-ID: 1812-0792/os/2005-1-17.
- Hosegood, P., H. van Haren and C. Veth. 2005. Mixing within the interior of the Faeroe-Shetland Channel. *J. Mar. Res.*, 63, 529-561.
- van Aken, H. M., L.R.M. Maas and H. van Haren. 2005. Observations of inertial wave events near the continental slope off Goban Spur. *J. Phys. Oceanogr.*, 35, 1329-1340.
- van Haren, H., 2005. Tidal and near-inertial peak variations around the diurnal critical latitude. *Geophys. Res. Lett.*, 32, L23611, doi:10.1029/2005GL024160.
- van Haren, H. and C. Millot, 2005. Gyroscopic waves in the Mediterranean Sea. *Geophys. Res. Lett.*, 32, L24614, doi:10.1029/2005GL023915.
- Bonnin, J., H. van Haren, P. Hosegood and G.-J.A. Brummer, 2006. Burst resuspension of seabed material at the foot of the continental slope in the Rockall Channel. *Mar. Geol.*, 226, 167-184.
- van Haren, H., C. Millot, and I. Taupier-Letage, 2006. Fast deep sinking in Mediterranean eddies. *Geophys. Res. Lett.*, 33, L04606, doi:10.1029/2005GL025367.
- van Haren, H., and C. Millot, 2006. Determination of buoyancy frequency in weakly stable waters. *J. Geophys. Res.*, 111, C03014, doi:10.1029/2005JC003065.
- van Haren, H., 2006. Asymmetric vertical internal wave propagation. *Geophys. Res. Lett.*, 33, L06618, doi:10.1029/2005GL025499.
- Hosegood, P. and H. van Haren. 2006. Sub-inertial modulation of semi-diurnal currents over the continental slope in the Faeroe-Shetland Channel. *Deep-Sea Res. I*, 53, 627-655.

- van Haren, H., 2006. Nonlinear motions at the internal tide source. *Geophys. Res. Lett.*, 33, L11605, doi:10.1029/2006GL025851.
- van Haren, H., 2007. Echo intensity data as a directional antenna for observing processes above sloping ocean bottoms. *Ocean Dyn*, 57, 135-149.
- van Haren, H. 2007. Shear at the critical diurnal latitude. *Geophys. Res. Lett.*, 34, L06601, doi:10.1029/2006GL028716.
- van Aken, H. M., H. van Haren and L.R.M. Maas. 2007. The high-resolution vertical structure of internal tides and near-inertial waves, measured with an ADCP over the continental slope in the Bay of Biscay. *Deep-Sea Res. I*, 54, 533-556.
- van Haren, H., 2007. Inertial and tidal shear variability above Reykjanes Ridge. *Deep-Sea Res. I*, 54, 856-870.
- van Haren, H. 2007. Unpredictability of internal M_2 . *Ocean Science*, 3, 337-344.
- van Haren, H. 2007. Monthly periodicity in acoustic reflections and vertical motions in the deep ocean, *Geophys. Res Lett.*, 34, L12603, doi:10.1029/2007GL029947.
- Gerkema, T., and H. van Haren, 2007. Internal tides and energy fluxes over Great Meteor Seamount. *Ocean Science*, 3, 441-449.
- van Haren, H., 2007. Longitudinal and topographic variations in North-Atlantic tidal and inertial currents around latitudes $30\pm 10^\circ\text{N}$. *J. Geophys. Res.*, 112, C10020, doi:10.1029/2007JC004193.
- van Haren, H., 2008. Self-regulation of deep-ocean internal wave continuum: observations on related near-inertial shear and high-frequency vertical motions. *Geophys. Res. Lett.*, 35, L04606, doi:10.1029/2007GL032697.
- van Haren, H., 2008. Abrupt transitions between gyroscopic and internal gravity waves: the mid-latitude case. *J. Fluid Mech.*, 598, 67-80.
- Burchard, H., P.D. Craig, J.R. Gemmrich, H. van Haren, P.-P. Mathieu, H.E.M. Meier, W.A.M. Nimmo Smith, H. Prandke, T.P. Rippeth, E.D. Skyllingstad, W.D. Smyth, D.J.S. Welsh, and H.W. Wijesekera, 2008. Observational and numerical modeling methods for quantifying coastal ocean turbulence and mixing. *Progr. Oceanogr.*, 76, 399-442.
- Gerkema, T., J.T.F. Zimmerman, L.R.M. Maas and H. van Haren, 2008. Geophysical and astrophysical fluid dynamics beyond the traditional approximation. *Rev. Geophys.*, 46, RG2004, doi:10.1029/2006RG000220.
- van Haren, H., 2008. A comparison between vertical motions measured by ADCP and inferred from temperature data. *Ocean Science*, 4, 215-222.
- Davies, A.J., G.C.A. Duineveld, M.S.S. Lavaleye, M.I.N. Bergman, H. van Haren and J. M. Roberts, 2009. Downwelling and deep-water bottom currents as food supply mechanisms to the cold-water coral *Lophelia pertusa* (Scleractinia) at the Mingulay Reef Complex. *Limnol. Oceanogr.*, 54, 620-629.
- van Haren, H., 2009. High-frequency vertical current observations in stratified seas and ocean. *Cont. Shelf Res.*, 29, 1251-1263.
- van Haren, H., and L. Gostiaux, 2009. High-resolution open-ocean temperature spectra. *J. Geophys. Res.*, 114, C05005, doi:10.1029/2008JC004967.
- van Haren, H., 2009. Using high-sampling rate ADCP for observing vigorous processes above sloping [deep] ocean bottoms. *J. Mar. Sys.*, 77, 418-427.
- van Haren, H., and C. Millot, 2009. Slantwise convection: a candidate for homogenization of deep newly formed dense waters. *Geophys. Res. Lett.*, 36, L12604, doi:10.1029/2009GL038736.
- van Haren, H., M. Laan, D.-J. Buijsman, L. Gostiaux, M.G. Smit and E. Keijzer, 2009. NIOZ3: independent temperature sensors sampling yearlong data at a rate of 1 Hz. *IEEE J. Ocean. Eng.*, 34, 315-322.
- van Haren, H., 2009. Ship-induced effects on bottom-mounted acoustic current meters in shallow seas. *Cont. Shelf Res.*, 29, 1809-1814.
- Roberts, J.M., A.J. Davies, L.A. Henry, L.A. Dodds, G.C.A. Duineveld, M.S.S. Lavaleye, C. Maier, R.W.M. van Soest, M.J.N. Bergman, V. Hühnerbach, V.A.I. Huvenne, D.J.

- Sinclair, T. Watmough, D. Long, S.L. Green and H. van Haren, 2009. Mingulay reef complex: an interdisciplinary study of cold-water coral habitat, hydrography and biodiversity. *Mar. Ecol. Prog. Ser.*, 397, 139-151.
- van Haren, H., and L. Gostiaux, 2010. A deep-ocean Kelvin-Helmholtz billow train. *Geophys. Res. Lett.*, 37, L03605, doi:10.1029/2009GL041890.
- Aguilar, J.A. et al. (ANTARES-collaboration incl. H. van Haren), 2010. Measurement of the atmospheric muon flux with a 4 GeV threshold in the ANTARES neutrino telescope. *Astropart. Phys.*, 33, 86-90.
- Gostiaux, L., and H. van Haren, 2010. Extracting meaningful information from uncalibrated backscattered echo intensity data. *J. Atmos. Ocean. Technol.*, 27, 943-949.
- van Haren, H., 2010. Rapid swing and spin of [deep] taut-wire-moored instruments. *Deep-Sea Res. I*, 57, 909-917.
- Aguilar, J.A. et al. (ANTARES-collaboration incl. H. van Haren), 2010. Zenith distribution and flux of atmospheric muons measured with the 5-line ANTARES detector. *Astropart. Phys.*, 34, 179-184.
- van Haren, H., 2010. Very near-bottom tidal straining in a sea strait. *Geophys. Res. Lett.*, 37, L16603, doi:10.1029/2010GL044186.
- Aguilar, J.A. et al. (ANTARES-collaboration incl. H. van Haren), 2010. Performance of the front-end electronics of the ANTARES neutrino telescope. *Nucl. Inst. and Meth. Phys. Res. A*, 622, 59-73.
- Bouruet-Aubertot, P., H. van Haren and M.-P. LeLong, 2010. Stratified inertial subrange inferred from in situ measurements in the bottom boundary layer of Rockall Channel. *J. Phys. Oceanogr.*, 40, 2401-2417.
- van Haren, H., L.R.M. Maas and T. Gerkema, 2010. Patchiness in internal tidal beams. *J. Mar. Res.*, 68, 237-257.
- Aguilar, J.A. et al. (ANTARES-collaboration incl. H. van Haren), 2011. AMADEUS - The Acoustic Neutrino Detection Test System of the ANTARES Deep-Sea Neutrino Telescope. *Nucl. Inst. and Meth. Phys. Res. A*, 626-627, 128-143.
- van Haren, H. (on behalf of the ANTARES collaboration), 2011. Meso- and small-scale vertical motions in the deep Western Mediterranean. *Nucl. Instr. Meth. A*, 626-627, S84-S86.
- Aguilar, J.A. et al. (ANTARES-collaboration incl. H. van Haren), 2011. Search for a diffuse flux of high-energy ν_μ with the ANTARES neutrino telescope. *Phys. Lett. B*, 696, 16-22.
- Aguilar, J.A. et al. (ANTARES-collaboration incl. H. van Haren), 2011. Time Calibration of the ANTARES neutrino telescope. *Astropart. Phys.*, 34, 539-549.
- Xie, X.-H., X.-D. Shang, H. van Haren, G.-Y. Chen and Y.-Z. Zhang, 2011. Observations of parametric subharmonic instability-induced near-inertial waves equatorward of the critical diurnal latitude. *Geophys. Res. Lett.*, 38, L05603, doi:10.1029/2010GL046521.
- Aguilar, J.A. et al. (ANTARES-collaboration incl. H. van Haren), 2011. A fast algorithm for track reconstruction and its application to the ANTARES neutrino telescope. *Astropart. Phys.*, 34, 552-662.
- van Haren, H. et al. (ANTARES-collaboration), 2011. Acoustic and optical variations during rapid downward motion episodes in the deep north-western Mediterranean Sea. *Deep-Sea Res. I*, 58, 875-884.
- Ageron, M. et al. (ANTARES-collaboration incl. H. van Haren), 2011. ANTARES: the first undersea neutrino telescope. *Nucl. Instr. Meth. A*, 656, 11-38.
- Hillebrand, T., J. van Heerwaarden, M. Laan, R. Bakker, R. Groenewegen and H. van Haren, 2011. Autonomous and rapid deployment of a compact taut-wire mooring. *Deep-Sea Res. I*, 58, 1158-1162.

- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2011. First Search for Point Sources of High Energy Cosmic Neutrinos with the ANTARES Neutrino Telescope. *Astrophys. J. Lett.*, 743, L14.
- van Haren, H., and L. Gostiaux, 2011. Large internal waves advection in very weakly stratified deep Mediterranean waters. *Geophys. Res. Lett.*, 38, L22603, doi:10.1029/2011GL049707.
- van Haren, H., 2011. Internal wave-turbulence pressure above sloping sea bottoms. *J. Geophys. Res.*, 116, C12004, doi:10.1029/2011JC007085.
- Ageron, M. et al. (ANTARES-collaboration incl. H. van Haren), 2012. The ANTARES telescope neutrino alert system. *Astropart. Phys.*, 35, 530-536.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2012. Measurement of the group velocity of light in sea water at the ANTARES site. *Astropart. Phys.*, 35, 552-557.
- Aguilar, J.A. et al. (ANTARES-collaboration incl. H. van Haren), 2012. A method for detection of muon induced electromagnetic showers with the ANTARES detector. *Nucl. Instr. Meth. A*, 675, 56-62.
- van Haren, H., L. Gostiaux, M. Laan, M. van Haren, E. van Haren, and L.J.A. Gerringa, 2012. Internal wave turbulence near a Texel beach. *PLoS ONE*, 7(3), e32535, doi: 10.1371/journal.pone.0032535.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2012. Search for relativistic magnetic monopoles with the ANTARES neutrino telescope. *Astropart. Phys.*, 35, 634-640.
- van Haren, H., and L. Gostiaux, 2012. Detailed internal wave mixing observed above a deep-ocean slope. *J. Mar. Res.*, 70, 173-197.
- Gerringa, L.J.A., A.-C. Alderkamp, P. Laan, C.-E. Thuróczy, H.J.W. De Baar, M.M. Mills, G.L. van Dijken, H. van Haren, K.R. Arrigo, 2012. Iron from melting glacier fuels the phytoplankton blooms in Amundsen Sea (Southern Ocean): iron biogeochemistry. *Deep-Sea Res. II*, 71-76: 16-31.
- van Haren, H., L. Gostiaux, 2012. Energy release through internal wave breaking. *Oceanography*, 25(2):124–131, <http://dx.doi.org/10.5670/oceanog.2012.47>.
- van Haren, H., 2012. High-frequency bottom-pressure and acoustic variations in a sea strait: internal wave - turbulence. *Ocean Dyn.*, 62, 1123-1137.
- Rijkenberg, M.J.A., S. Steigenberger, C.F. Powell, H. van Haren, M.D. Patey, A.R. Baker, E.P. Achterberg, 2012. Fluxes and distribution of dissolved iron in the eastern (sub-) tropical North Atlantic Ocean. *Glob. Biogeochem. Cycl.*, 26, GB3004, doi:10.1029/2011GB004264.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2012. The positioning system of the ANTARES neutrino telescope. *J. Instr.*, 7, T08002, doi:10.1088/1748-0221/7/08/T08002.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2012. Measurement of neutrino oscillations with the ANATRES detector. *Phys. Lett. B*, 714, 224-230.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2012. Search for neutrino emission from gamma-ray flaring blazars with the ANTARES telescope. *Astrop. Phys.*, 36, 204-210.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2012. Search for cosmic neutrino point sources with four years of data from the ANTARES telescope. *Astrophys. J.*, 760, 53 (10 pp).
- Gerkema, T. and H. van Haren, 2012. Absence of internal tidal beams due to non-uniform stratification. *J. Sea Res.*, 74, 2-7.
- van Haren, H., 2012. Ocean's internal motion: a short review of NIOZ thermistor string observations. *J. Sea Res.*, 74, 8-15.
- Gostiaux, L. and H. van Haren, 2012. Fine-structure contamination by internal waves in the Canary Basin. *J. Geophys. Res.*, 117, C11, doi:10.1029/2012JC008064.

- van Haren, H., 2013. Bottom-pressure observations of deep-sea internal hydrostatic and non-hydrostatic motions. *J. Fluid Mech.*, 714, 591-611.
- Adrián-Martinez, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2013. Detection potential of the KM3NeT detector for high-energy neutrinos from the Fermi bubbles. *Astropart. Phys.*, 42, 7-14.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2013. First search for neutrinos in correlation with gamma-ray bursts with the ANTARES neutrino telescope. *J. Cosm. Astrop. Phys.*, (2013)03, 006, doi:10.1088/1475-7516/2013/03/006.
- Gerkema, T., L.R.M. Maas, and H. van Haren, 2013. A note on the role of mean flows in Doppler shifted frequencies. *J. Phys. Oceanogr.*, 43, 432-441.
- Adrián-Martinez, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2013. Expansion cone for the 3-inch PMTs of the KM3NeT Optical Modules. *J. Instr.*, 2013, 8, T03006.
- van Haren, H., M. Ribó, and P. Puig, 2013. (Sub-)inertial wave boundary turbulence in the Gulf of Valencia. *J. Geophys. Res. Oceans*, 118, 2067-2073, doi:10.1002/jgrc.20168.
- Xie, X., Shang, X., van Haren, H., Chen, G., 2013. Observations of enhanced nonlinear instability in the surface reflection of internal tides. *Geophys. Res. Lett.*, 40, 1580-1586, doi:10.1002/2012GL053222.
- van Haren, H., and T.J. Compton, 2013. Diel vertical migration in deep sea plankton is finely tuned to latitudinal and seasonal day length. *PLoS ONE*, 8, e64435 doi:10.1371/journal.pone.0064435.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2013. A first search for coincident gravitational waves and high energy neutrinos using LIGO, VIRGO and ANTARES data from 2007. *J. Cosm. Astrop. Phys.*, (2013)06, 008, doi:10.1088/1475-7516/2013/06/008.
- Tamburini, C. et al. (ANTARES-collaboration incl. H. van Haren), 2013. Deep-sea bioluminescence blooms after dense water formation at the ocean surface. *PloS ONE*, 8, e67523, doi:10.1371/journal.pone.0067523.
- De Wolf, E., R. Bakker, H. Boer Rookhuizen, L. Gostiaux, R. Groenewegen, H. van Haren, J. van Heerwaarden, T. Hillebrand, M. Laan, A. Smit, For the KM3NeT consortium, 2013. A launching vehicle for optical modules of a deep-sea neutrino telescope. *Nucl. Instr. Meth. A*, 725, 441-444.
- van Haren, H., and J. Greinert, 2013. Variability of internal frontal bore breaking above Opouawe Bank methane seep area (New Zealand). *Geochem. Geophys. Geosys.*, 14, 2460-2473, doi:10.1002/ggge.20170.
- Morozov, E.G., R.Y. Tarakanov, and H. van Haren, 2013. Transport of Antarctic bottom water through the Kane Gap, tropical NE Atlantic Ocean. *Ocean Sci.*, 9, 825-835.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2013. Search for a correlation between ANTARES neutrinos and Pierre Auger observatory UHECRs arrival directions. *Astrophys. J.*, 774:19 (7 pp).
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2013. Search for muon neutrinos from gamma-ray bursts with the ANTARES neutrino telescope using 2008 to 2011 data. *Astron. Astrophys.*, 559, A9, doi:10.1051/0004-6361/201322169.
- van Haren, H., 2013. Stratified turbulence and small-scale internal waves above deep-ocean topography. *Phys. Fluids*, 25, 106604, doi:10.1063/1.4826888.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2013. Measurement of the atmospheric ν_μ energy spectrum from 100 GeV to 200 TeV with the ANTARES telescope. *Eur. Phys. J. C.*, 73, 2606, doi:10.1140/epjc/s10052-013-2606-4.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2013. First results on dark matter annihilation in the sun using the ANTARES neutrino telescope. *J. Cosm. Astrop. Phys.*, (2013)11, 032, doi:10.1088/1475-7516/2013/11/032.
- van Haren, H., E. Morozov, L. Gostiaux, and R. Tarakanov, 2013. Convective and shear-induced turbulence in the deep Kane Gap. *J. Geophys. Res.*, 118, 5924-5930, doi:10.1002/2013JC009282.

- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2014. A search for neutrino emission from the Fermi bubbles with the ANTARES telescope. *Eur. Phys. J. C.*, 74, 2701, doi:10.1140/epjc/s10052-013-2701-6.
- van Haren, H., L. Gostiaux, 2014. Characterizing turbulent overturns in CTD-data. *Dyn. Atmos. Oceans*, 66, 58-76.
- van Haren, H. et al. (ANTARES Collaboration), 2014. High-frequency internal wave motions at the ANTARES site in the deep Western Mediterranean. *Ocean Dyn.*, 64, 507-517.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2014. Searches for point-like and extended neutrino sources close to the Galactic Centre using the ANTARES neutrino telescope. *Astrophys. J. Lett.*, 786, L5, doi:10.1088/2041-8205/786/1/L5.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2014. Searches for clustering in the time integrated skymap of the ANTARES neutrino telescope. *J. Cosm. Astrop. Phys.*, (2014)5, 001, doi:10.1088/1475-7516/2014/05/001.
- Mienis, F., G.C.A. Duineveld, A.J. Davies, M. Lavaleye, S.W. Ross, H. Seim, J.M. Bane, H. van Haren, M. Bergman, H. de Haas, S. Brooke and T. van Weering, 2014. Cold-water coral growth under extreme environmental conditions, the Cape Lookout area, NW Atlantic. *Biogeosci.*, 11, 2543-2560, doi:10.1594/bg-11-2543-2014.
- van Haren, H., F. Mienis, G.C.A. Duineveld, M.S.S. Lavaleye, 2014. High-resolution temperature observations of a trapped nonlinear diurnal tide influencing cold-water corals on the Logachev mounds. *Progr. Oceanogr.*, 125, 16-25.
- van Haren, H., 2014. Internal wave – zooplankton interactions in the Alboran Sea (W-Mediterranean). *J. Plankt. Res.*, 36, 1124-1134.
- Booij, K., R. van Bommel, H.M. van Aken, H. van Haren, G.-J.A. Brummer, H. Ridderinkhof, 2014. Passive sampling of nonpolar contaminants at three deep-ocean sites. *Environ. Poll.*, 195, 101-108.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2014. A search for time dependent neutrino emission from microquasars with the ANTARES telescope. *J. High Energy Astrophys.*, 3-4, 9-17.
- Adrián-Martinez, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2014. Deep sea tests of a prototype of the KM3NeT digital optical module. *Eur. Phys. J. C*, 74, 3056.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2014. Constraining the neutrino emission of gravitationally lensed flat-spectrum radio quasars with ANTARES data. *J. Cosm. Astrop. Phys.*, (2014)11, 017, doi:10.1088/1475-7516/2014/11/017.
- Cimatoribus, A.A., H. van Haren, L. Gostiaux, 2014. Comparison of Ellison and Thorpe scales from Eulerian ocean temperature observations. *J. Geophys. Res.*, 119, 7047-7065, doi:10.1002/2014JC010132.
- van Haren, H., L. Gostiaux, E. Morozov, and R. Tarakanov, 2014. Extremely long Kelvin-Helmholtz billow trains in the Romanche Fracture Zone. *Geophys Res. Lett.*, 41, 8445-8451, doi:10.1002/2014GL062421.
- Ribó, M., P. Puig, H. van Haren, 2015. Hydrodynamics over the Gulf of Valencia continental slope and their role in sediment transport. *Deep-Sea Res. I*, 95, 54-66.
- van Haren, H., 2015. Impressions of the turbulence variability in a weakly stratified, flat-bottom deep-sea ‘boundary layer’. *Dyn. Atmos. Oceans*, 69, 12-25.
- van Haren, H., 2015. Instability observations associated with wave breaking in the stable-stratified deep-ocean. *Phys. D*, 292-293, 62-69.
- van Haren, H, M. de Jong, P. Kooijman, 2015. Yearlong moored bioluminescence and current data at KM3NeT neutrino telescope sites in the deep Ionian Sea. *Astropart. Phys.*, 67, 1-7.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2015. ANTARES constrains a blazar origin of two IceCube PeV neutrino events. *Astron. & Astrophys.*, 576, L8, doi:10.1051/0004-6361/201525670.

- van Haren, H., A.A. Cimadoribus, L. Gostiaux, 2015. Where large deep-ocean waves break. *Geophys. Res. Lett.*, 42, 2351-2357, doi:10.1002/2015GL063329.
- Cimadoribus, A.A., H. van Haren, 2015. Temperature statistics above a deep-ocean sloping boundary. *J. Fluid Mech.*, 775, 415-435.
- van Haren, H., L. Gostiaux, 2015. Distinguishing turbulent overturns in high-sampling-rate moored thermistor string observations. *J. Mar. Res.*, 73, 17-32.
- van Haren, H., 2015. A composite vertical current spectrum for strongly and weakly stratified seas and oceans. *J. Mar. Res.*, 73, 33-48.
- van Haren, H., 2015. Atypical anticlockwise internal tidal motions in the deep ocean. *Tellus A*, 67, 27718, doi:10.3402/tellusa.v67.27718.
- van Haren, H., 2015. Ship motion effects in CTD-data from weakly stratified waters of the Puerto Rico Trench. *Deep-Sea Res. I*, 105, 19-25.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2015. Search of dark matter annihilation in the galactic centre using the ANTARES neutrino telescope. *J. Cosm. Astrop. Phys.*, 10, 068.
- Gerringa, L.J.A., P. Laan, G.L. van Dijken, H. van Haren, H.J.W. De Baar, K.R. Arrigo, A.-C. Alderkamp, 2015. Sources of iron in the Ross Sea Polynya in early summer. *Mar. Chem.*, 177, 447-459.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2015. Search for muon-neutrino emission from GeV and TeV gamma-ray flaring blazars using five years of the ANTARES telescope. *J. Cosm. Astrop. Phys.*, 12, 014.
- Cyr, F., H. van Haren, 2016. Observations of small-scale secondary instabilities during the shoaling of internal bores on a deep-ocean slope. *J. Phys. Oceanogr.*, 46, 219-231.
- Adrián-Martinez, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2016. The prototype detection unit of the KM3NeT detector. *Eur. Phys. J. C*, 76, 54, 1-12.
- Cyr, F., H. van Haren, F. Mienis, G. Duineveld, D. Bourgault, 2016. On the influence of cold-water coral mound size on flow hydrodynamics, and vice-versa. *Geophys. Res. Lett.*, 775-783, doi:10.1002/2015GL067038.
- van Haren, H., M. Laan, 2016. An in-situ experiment identifying flow effects on temperature measurements using a pumped CTD in weakly stratified waters. *Deep-Sea Res. I*, 111, 11-15.
- van Haren, H., 2016. Do deep-ocean kinetic energy spectra represent deterministic or stochastic signals? *J. Geophys. Res.*, 121, 240-251, doi:10.1002/2015JC011204.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2016. Optical and X-ray early follow-up of ANTARES neutrino alerts. *J. Cosm. Astrop. Phys.*, 02, 062.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2016. Time calibration with atmospheric muon tracks in the ANTARES neutrino telescope. *Astrop. Phys.*, 78, 43-51.
- Cimadoribus, A.A., H. van Haren, 2016. Estimates of the temperature flux-temperature gradient relation above a sea-floor. *J. Fluid Mech.*, 793, 504-523.
- Croft, S. et al. (for the MWA-collaboration), Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2016. Murchison widefield array limits on radio emission from ANTARES neutrino events. *Astrop. J. Lett.*, 820, L24.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2016. A search for secluded dark matter in the sun with the ANTARES telescope. *J. Cosm. Astrop. Phys.*, 05 (2016) 016.
- Adrián-Martinez, S. et al. (ANTARES&IceCube-collaborations incl. H. van Haren), 2016. First combined search for neutrino point-sources in the Southern Hemisphere with the ANTARES and IceCube neutrino telescopes. *Astrop. J.*, 823, 65.
- van Haren, H., A.A. Cimadoribus, F. Cyr, L. Gostiaux, 2016. Insights from a 3-D temperature sensors mooring on stratified ocean turbulence. *Geophys. Res. Lett.*, 43, 4483-4489 doi:10.1002/2016GL068032.

- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2016. Limits on dark matter annihilation in the sun using the ANTARES neutrino telescope. *Phys. Lett. B*, 759, 69-74.
- van Haren, H., J. Greinert, 2016. Turbulent high-latitude oceanic intrusions – details of non-smooth apparent isopycnal transport West of Svalbard. *Ocean Dyn.*, 66, 785-794.
- Adrián-Martinez, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2016. KM3MeT 2.0 Letter of intent for ARCA and ORCA. *J. Phys. G: Nucl. Part. Phys.*, 43, 084001.
- Adrián-Martinez, S. et al. (ANTARES, Icecube, LIGO Scientific and Virgo-collaborations incl. H. van Haren), 2016. High-energy neutrino follow-up search of gravitational wave event GW150914 with ANTARES and IceCube. *Phys. Rev. D*, 93, 122010.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2016. Constraints on the neutrino emission from the Galactic Ridge with the ANTARES telescope. *Phys. Lett. B*, 760, 143-148.
- Cimatoribus, A.A., H. van Haren, L. Gostiaux, 2016. A procedure to compensate for the response drift of a large set of thermistors. *J. Atmos. Ocean. Tech.*, 33, 1495-1508.
- van Haren, H., L. Gostiaux, 2016. Convective mixing by internal waves in the Puerto Rico Trench. *J. Mar. Res.*, 74, 161-173.
- van Haren, H., J. van Heerwaarden, R. Bakker, M. Laan, 2016. Construction of a 3D mooring array of temperature sensors. *J. Atmos. Oceanic Technol.*, 33, 2247-2257.
- Adrián-Martinez, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2016. A method to stabilise the performance of negatively fed KM3NeT photomultipliers. *JINST*, 11, P12014.
- Adrián-Martinez, S. et al. (ANTARES-collaboration incl. H. van Haren), 2017. Stacked search for time shifted high energy neutrinos from gamma ray bursts with the ANTARES neutrino telescope. *Eur. Phys. J. C*, 77:20.
- van Haren, H., 2017. Exploring the vertical extent of breaking internal wave turbulence above deep-sea topography. *Dyn. Atmos. Oceans*, 77, 89-99.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2017. Time-dependent search for neutrino emission from X-ray binaries with the ANTARES telescope. *J. Cosm. Astrop. Phys.*, 04 (2017) 019.
- André, M. et al. (ANTARES-collaboration incl. H. van Haren), 2017. Sperm whale diel long-range echolocation sounds revealed by ANTARES, a deep-sea neutrino telescope. *Nat. Sci. Rep.*, 7, 45517.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2017. Results from the search for dark matter in the Milky Way with 9 years of data of the ANTARES neutrino telescope. *Phys. Lett. B*, 769, 249-254.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2017. Search of dark matter annihilation in the earth using the ANTARES neutrino telescope. *Phys. Dark Univ.*, 16, 41-48.
- van Haren, H., P. Puig, 2017. Internal wave turbulence in the Llobregat prodelta (NW Mediterranean) under stratified conditions: a mechanism for sediment waves generation? *Mar. Geol.*, 388, 1-11.
- Adrián-Martinez, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2017. Intrinsic limits on resolutions in muon- and electron-neutrino charged-current events in the KM3NeT/ORCA detector. *J. High-Ener. Phys.*, 05(2017)008.
- van Haren, H., P.J. Hosegood, 2017. A downslope propagating thermal front over the continental slope. *J. Geophys. Res. Oceans*, 122, 3191-3199, doi:10.1002/2017JC012797.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2017. Search for high-energy neutrinos from bright GRBs with ANTARES. *Mon. Not. Roy. Astron. Soc. MNRAS*, 469, 906-915.
- Petroff, E. et al. (incl. ANTARES-collaboration incl. H. van Haren, H.E.S.S.-collaboration), 2017. A polarized fast radio burst at low galactic latitude. *Mon. Not. Roy. Astron. Soc. MNRAS*, 469, 4465-4482.

- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2017. An algorithm for the reconstruction of high-energy neutrino-induced particle showers and its application to the ANTARES neutrino telescope. *Eur. Phys. J. C*, 77:419.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2017. Search for relativistic magnetic monopoles with five years of the ANTARES detector data. *J. High-Ener. Phys.*, 07 (2017) 054.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren, IceCube-collaboration, LIGO Scientific Collaboration and Virgo-collaboration), 2017. Search for high-energy neutrinos from gravitational wave event GW151226 and candidate LVT151012 with ANTARES and IceCube. *Phys. Rev. D*, 96, 022005.
- Gerringa, L.J.A., H.A. Slagter, J. Brown, H. van Haren, P. Laan, H.J.W. de Baar, M.J.A. Rijkenberg, 2017. Dissolved Fe and Fe-binding organic ligands in the Mediterranean Sea – Geotraces G04. *Mar. Chem.*, 194, 100-113.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2017. New constraints on all flavour Galactic diffuse neutrino emission with the ANTARES telescope. *Phys. Rev. D*, 96, 062001.
- van Haren, H., 2017. AABW-transport variation and its effect on internal wave motions between top and bottom of Puerto Rico Trench. *J. Mar. Res.*, 75, 507-529.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2017. First all-flavor neutrino pointlike source search with the ANTARES neutrino telescope. *Phys. Rev. D*, 96, 082001.
- Abbott, B.P. et al. (LIGO-Virgo collaboration et al. incl. ANTARES-collaboration incl. H. van Haren), 2017. Multi-messenger observations of a binary neutron star merger. *Astrophys. J. Lett.*, 848, L12 (59 pp).
- van Haren, H., G. Duineveld, H. de Stigter, 2017. Prefrontal bore mixing. *Geophys. Res. Lett.*, 44, 9408–9415, doi:10.1002/2017GL074384.
- van Haren, H., C. Berndt, I. Klauke, 2017. Ocean mixing in deep-sea trenches: new insights from the Challenger Deep, Mariana Trench. *Deep-Sea Res. I*, 129, 1-9.
- Albert, A. et al. (a.o. ANTARES-collaboration incl. H. van Haren), 2017. Search for high-energy neutrinos from binary neutron star merger GW170817 with ANTARES, IceCube and the Pierre Auger Observatory. *Astrophys. J. Lett.*, 850, L35 (18 pp).
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2017. An algorithm for the reconstruction of neutrino-induced showers in the ANTARES neutrino telescope. *Astrophys. J.*, 154:275 (9 pp).
- van Haren, H., U. Hanz, H. de Stigter, F. Mienis, G. Duineveld, 2017. Internal wave turbulence at a biologically rich Mid-Atlantic seamount. *PLoS ONE*, 12(12), e0189720.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2017. All-sky search for high-energy neutrinos from gravitational wave event GW170104 with the ANTARES neutrino telescope. *Eur. Phys. J. C*, 77:911.
- Bhandari, S. et al. (incl. the ANTARES-collaboration incl. H. van Haren), 2018. The SURvey for Pulsars and Extragalactic Radio Bursts II: New FRB discoveries and their follow-up. *Mon. Not. Roy. Astron. Soc. MNRAS*, 475, 1427-1446.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2018. All-flavor search for a diffuse flux of cosmic neutrinos with 9 years of ANTARES data. *Astrophys. J. Lett.*, 853, L7 (5pp).
- Bown, J., H. van Haren, M. Meredith, H. Venables, P. Laan, A. Brearley, H.J.W. de Baar, 2018. Evidences of strong DFe and DMn sources in Ryder Bay, Western Antarctic Peninsula. *Phil. Trans. Roy. Soc. A*, 376, 20170172, <http://dx.doi.org/10.1098/rsta.2017.0172>.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2018. Characterisation of the Hamamatsu photomultipliers for the KM3NeT Neutrino Telescope. *JINST*, 13, P05035.

- van Haren, H., 2018. Abyssal plain hills and internal wave turbulence. *Biogeosci.*, 15, 4387-4403, <https://doi.org/10.5194/bg-15-4387-2018>.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2018. The search for neutrinos from TXS 0506+056 with the ANTARES telescope. *Astrophys. J. Lett.*, 863, L30 (6 pp).
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2018. Long-term monitoring of the ANTARES optical module efficiencies using ^{40}K decays in sea water. *Eur. Phys. J. C*, 78:669.
- van Haren, H., 2018. Philosophy and application of high-resolution temperature sensors for stratified waters. *Sensors*, 18, 3184, doi:10.3390/s18103184.
- van Haren, H., 2018. Grand challenges in physical oceanography. *Front. Mar. Sci.*, 5, 404, doi:10.3389/fmars.2018.00404.
- Albert, A. et al. (ANTARES- and IceCube-collaboration incl. H. van Haren), 2018. Joint constraints on Galactic diffuse neutrino emission from the ANTARES and IceCube neutrino telescopes. *Astrophys. J. Lett.*, 868, L20 (7 pp).
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2019. The search for high-energy neutrinos coincident with fast radio bursts with the ANTARES neutrino telescope. *Mon. Not. Roy. Astron. Soc. MNRAS*, 482, 184-193.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2018. The cosmic ray shadow of the Moon with the ANTARES neutrino telescope. *Eur. Phys. J. C*, 78, 1006.
- Tarakanov, R., E. Morozov, H. van Haren, N. Makarenko, T. Demidova, 2018. Structure of the deep spillway in the western part of the Romanche Fracture Zone. *J. Geophys. Res.*, 123, 8508-8531, doi:10.1029/2018JC013961.
- van Haren, H., G. Duineveld, F. Mienis, 2019. Internal wave observations off Saba Bank. *Front. Mar. Sci.*, 5, 528, doi:10.3389/fmars.2018.00528.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren, IceCube, LIGO/VIRGO), 2019. Search for multimessenger sources of gravitational waves and high-energy neutrinos with advanced LIGO during its first observational run, ANTARES, and IceCube. *Astrophys. J.*, 870:134 (16 pp).
- van Haren, H., 2019. Open-ocean interior moored sensor turbulence estimates, below a Meddy. *Deep-Sea Res. I*, 144, 75-84.
- van Haren, H., 2019. Autumnal deep scattering layer from moored acoustic sensing in the subtropical Canary Basin. *Mar. Biol.*, 166, 43, 1-6, <https://doi.org/10.1007/s00227-019-3491-7>.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2019. Sensitivity of the KM3NeT/ARCA neutrino telescope to point-like neutrino sources. *Astropart. Phys.*, 111, 100-110.
- Davison, J.J., H. van Haren, P. Hosegood, N. Piechaud, K.L. Howell, 2019. The distribution of deep-sea sponge aggregations (Porifera) in relation to oceanographic processes in the Faroe-Shetland Channel. *Deep-Sea Res. I*, 146, 55-61.
- van Haren, H., 2019. Turbulent convection and high-frequency internal wave details in 1-m shallow waters. *Limnol. Oceanogr.*, 64, 1323-1332.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2019. Model-independent search for neutrino sources with the ANTARES neutrino telescope. *Astropart. Phys.*, 114, 35-47.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2019. Measuring the atmospheric neutrino oscillation parameters and constraining the 3+1 neutrino model with ten years of ANTARES data. *J. High Ener. Phys.*, 06 (2019) 113.
- van Haren, H., 2019. Deep-ocean inertial subrange small bandwidth coherence and Ozmidov-frequency separation. *Phys. Fluids*, 31, 066603.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2019. ANTARES neutrino search for time and space correlations with IceCube high-energy neutrino events. *Astrophys. J.*, 879:108 (8 pp).

- van Haren, H., 2019. Internal wave mixing in warming Lake Grevelingen. *Est. Coast. Shelf Sci.*, 226, 106298.
- van Haren, H., 2019. Off-bottom turbulence expansions of unbounded flow over a deep-ocean ridge. *Tellus A*, 71,1, 1-10, doi:10.1080/16000870.2019.1653137.
- Ayala Solares, H. A. et al. (AMON and ANTARES-collaboration incl. H. van Haren), 2019. A search for cosmic neutrino and gamma-ray emitting transients in 7.3 years of ANTARES and Fermi LAT data. *Astrophys. J.*, 886, 98 (8 pp).
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2019. KM3NeT front-end and readout electronics system: hardware, firmware and software. *J. Astron. Telesc. Instrum. Syst.*, 5, 046001.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2020. Model-independent search for neutrino sources with the ANTARES neutrino telescope. *Astropart. Phys.*, 114, 35-47.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2020. Dependence of atmospheric muon flux on seawater depth measured with the first KM3NeT detection units. *Eur. Phys. J. C*, 80, 99.
- van Haren, H., 2020. Slow persistent mixing in the abyss. *Ocean Dyn.*, 70, 339-352.
- Albert, A. et al. (IceCube and ANTARES-collaboration incl. H. van Haren), 2020. ANTARES and IceCube combined search for neutrino point-like and extended sources in the Southern Sky. *Astrophys. J.*, 892, 92 (12 pp).
- van Haren, H., W.-C. Chi, C.-F. Yang, Y.J. Yang, S. Jan, 2020. Deep sea floor observations of typhoon driven enhanced ocean turbulence. *Progr. Oceanogr.*, 184, 102315 (12 pp)
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2020. Search for dark matter towards the Galactic Centre with 11 years of ANTARES data. *Phys. Lett. B*, 805, 135439.
- van Haren, H., 2020. High-resolution temperature observations of a shallow lagoon in the South Pacific (Bora Bora). *J. Coast. Res.*, 36, 536-544.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2020. Search for neutrino counterparts of gravitational-wave events detected by LIGO and Virgo during run O2 with the ANTARES telescope. *Eur. Phys. J. C*, 80, 487.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2020. The control unit of the KM3NeT data acquisition system. *Comp. Phys. Comm.*, 256, 107433.
- van Haren, H., M. Laan, S. Asjes, B. Denissen, 2020. Deep caller for ocean acoustic releases. *J. Atmos. Ocean. Technol.*, 37, 1135-1137.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2020. gSeaGen : a GENIE-based code for neutrino telescopes. *Comp. Phys. Comm.*, 256, 107477.
- Gerringa, L.J.A., A.-C. Alderkamp, P. Laan, C.-E. Thuróczy, H.J.W. de Baar, M.M. Mills, G.L. van Dijken, H. van Haren, K.R. Arrigo, 2020. Corrigendum to “Iron from melting glaciers fuels the phytoplankton blooms in Amundsen Sea (Southern Ocean): iron biogeochemistry” (Gerringa et al., 2012). *Deep-Sea Res. II*, 177, 104843.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2020. Event reconstruction for KM3NeT/ORCA using convolutional neural networks. *JINST*, 15, P10005.
- van Haren, H., 2020. Challenger Deep internal wave turbulence events. *Deep-Sea Res. I*, 165, 103400 & Cover 103413.
- Albert, A. et al. (IceCube and ANTARES-collaboration incl. H. van Haren), 2020. Combined search for neutrinos from dark matter self-annihilation in the Galactic Centre with ANTARES and IceCube. *Phys. Rev. D*, 102, 082002 (13 pp).
- Aiello, S. et al. (KM3NeT-collaboration; corr. authors H. van Haren, E. de Wolf, E. Berbee), 2020. Deep-sea deployment of the KM3NeT neutrino telescope detection units by self-unrolling. *JINST*, 15, P11027.

- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2020. Observation of the cosmic ray shadow of the Sun with the ANTARES neutrino telescope. *Phys. Rev. D*, 102, 122007.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2021. Constraining the contribution of Gamma-Ray Bursts to the high-energy diffuse neutrino flux with 10 years of ANTARES data. *Mon. Not. Roy. Astron. Soc.*, 500, 5614-5628.
- van Haren, H., H. Uchida, D. Yanagimoto, 2021. Further correcting pressure effects on SBE911 CTD-conductivity data from hadal depths. *J. Oceanogr.*, 77, 137-144.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2021. Architecture and performance of the KM3NeT front-end firmware. *J. Astron. Telesc. Instrum. Syst.*, 7, 016001.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2021. Monte Carlo simulations in the ANTARES underwater neutrino telescope. *J. Cos. Astrop. Phys.*, 01(2021), 064.
- Yang, C.-F., W.-C. Chi, H. van Haren, 2021. Deep-sea turbulence evolution observed by multiple closely spaced instruments. *Sci. Rep.*, 11, 3919, doi:10.1038/s41598-021-83419-2.
- van Haren, H., C.P.D. Brussaard, L.J.A. Gerringa, M. van Manen, R. Middag, R. Groenewegen, 2021. Diapycnal mixing near the photic zone of the NE-Atlantic. *Ocean Sci.*, 17, 301-318, doi:10.5194/os-17-301-2021.
- Schine, C.M.S., A.-C. Alderkamp, G. van Dijken, L.J.A. Gerringa, S. Sergi, P. Laan, H. van Haren, W. van de Poll, K.R. Arrigo, 2021. Massive Southern Ocean phytoplankton bloom fed by iron of possible hydrothermal origin. *Nat. Comm.*, 12, 1211, doi:10.1038/s41467-021-21339-5.
- Haalboom, S., H. de Stigter, G. Duineveld, H. van Haren, G.-J. Reichart, F. Mienis, 2021. Suspended particulate matter in a submarine canyon (Whittard Canyon, Bay of Biscay, NE Atlantic Ocean): Assessment of commonly used instruments to record turbidity. *Mar. Geol.*, 434, 106439.
- van Haren, H., S. Piccolroaz, M. Amadori, M. Toffolon, H.A. Dijkstra, 2021. Moored observations of turbulent mixing events in Lake Garda, Italy. *J. Limnol.*, 80(1):1983, doi:10.4081/jlimnol.2020.1983.
- Hanz, U., E.M. Roberts, G. Duineveld, A. Davies, H. van Haren, H.T. Rapp, G.-J. Reichart, F. Mienis, 2021. Long-term observations reveal environmental conditions and food supply mechanisms at an Arctic deep-sea sponge ground. *J. Geophys. Res.*, 126, e2020JC016776, doi:10.1029/2020JC016776.
- Amadori, M., L. Giovannini, M. Toffolon, S. Piccolroaz, D. Zardi, M. Bresciani, C. Giardino, G. Luciani, M. Kliphuis, H. van Haren, H. Dijkstra, 2021. Multi-scale evaluation of a 3D lake model forced by an atmospheric model against standard monitoring data. *Env. Mod. Soft.*, 139, 105017.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2021. Measurement of the atmospheric ν_e and ν_μ energy spectra with the ANTARES neutrino telescope. *Phys. Lett. B*, 816, 136228.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2021. ANTARES upper limits on the multi-TeV neutrino emission from the GRBs detected by IACTs. *J. Cos. Astrop. Phys.*, 03(2021)092.
- van Haren, H., H.A. Dijkstra, 2021. Convection under internal waves in an alpine lake. *Env. Fluid Mech.*, 21, 305-316.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2021. ANTARES search for point-sources of neutrinos using astrophysical catalogs: a likelihood analysis. *Astrophys. J.*, 911:48 (11pp).
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2021. The KM3NeT potential for the next core-collapse supernova observation with neutrinos. *Eur. Phys. J. C*, 81, 445.

- Biemond, B., M. Amadori, M. Toffolon, S. Piccolroaz, H. van Haren, H.A. Dijkstra, 2021. Deep mixing and deep-cooling events in Lake Garda: Simulation and mechanisms. *J. Limnol.*, 80(2):2010, doi:10.4081/jlimnol.2020.2010.
- van Haren, H., R. Bakker, Y. Witte, M. Laan, J. van Heerwaarden, 2021. Half a cubic hectometer mooring array 3D-T of 3000 temperature sensors in the deep sea. *J. Atmos. Ocean. Technol.*, 38, 1585-1597.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2021. Search for neutrinos from the tidal disruption events AT2019dsg and AT2019fdr with the ANTARES telescope. *Astrophys. J.*, 920:50 (6 pp).
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2021. Sensitivity to light sterile neutrino mixing parameters with KM3NeT/ORCA. *J. High Ener. Phys.*, 10, 180.
- Yang, C.-F., W.-C. Chi, H. van Haren, C.-R. Lin, B.-Y. Kuo, 2021. Tracking deep-sea internal wave propagation with a differential pressure gauge array. *Sci. Rep.*, 11, 23311, doi:10.1038/s41598-021-02721-1.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2022. Determining the neutrino mass ordering and oscillation parameters with KM3NeT/ORCA. *Eur. Phys. J. C*, 82, 26.
- van Haren, H., F. Mienis, G. Duineveld, 2022. Contrasting internal tide turbulence in a tributary of the Whittard Canyon. *Cont. Shelf Res.*, 236, 104679.
- Aiello, S. et al. (KM3NeT-(and JUNO-)collaborations incl. H. van Haren), 2022. Combined sensitivity of JUNO and KM3NeT/ORCA to the neutrino mass ordering. *J. High Ener. Phys.*, 03(2022), 055.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2022. Search for magnetic monopoles with ten years of the ANTARES neutrino telescope. *J. High-Ener. Astrophys.*, 34, 1-8.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2022. Implementation and first results of the KM3NeT real-time core-collapse supernova neutrino search. *Eur. Phys. J. C*, 82, 317.
- van Haren, H., G. Voet, M.H. Alford, D.J. Torres, 2022. Internal wave breaking near the foot of a steep East-Pacific continental slope. *Progr. Oceanogr.*, 205, 102817.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2022. Search for solar atmospheric neutrinos with the ANTARES neutrino telescope. *J. Cosm. Astrop. Phys.*, 06(2022)018.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren, and other collab.), 2022. Search for secluded dark matter towards the Galactic Centre with the ANTARES neutrino telescope. *J. Cosm. Astrop. Phys.*, 06(2022), 028.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2022. Search for non-standard interactions with 10 years of ANTARES data. *J. High-Ener. Phys.*, 07(2022), 048.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2022. Nanobeacon: A time calibration device for the KM3NeT neutrino telescope. *Nucl. Instr. Meth. Phys. Res. A*, 1040, 167132.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2022. The KM3NeT multi-PMT optical module. *JINST*, 17, P07038.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren, and other collaborations), 2022. Search for spatial correlations of neutrinos with ultra-high-energy cosmic rays. *Astrophys. J.*, 934, 164 (21 pp).
- van Haren, H., F.C. Bosveld, 2022. Internal wave and turbulence observations with very high-resolution temperature sensors along the Cabauw mast. *J. Atmos. Ocean. Technol.*, 39, 1149-1165.
- van Haren, H., 2022. Thermistor string corrections in data from very weakly stratified deep-ocean waters. *Deep-Sea Res. I*, 189, 103870.
- van Haren, H., 2022. KmT, kilometer-long mooring of high-resolution temperature measurements results overview. *Dyn. Atmos. Oc.*, 100, 101336.

- van Haren, H., L. Maas, 2022. A simple model for an internal wave spectrum dominated by non-linear interactions. *Tellus A*, 74, 382-390.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2023. Limits on the nuclearite flux using the ANTARES neutrino telescope. *J. Cosm. Astrop. Phys.*, 01(2023)012.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2023. KM3NeT broadcast optical data transport system. *JINST*, 18, T02001.
- van Haren, H., 2023. Convection and intermittency noise in water temperature near a deep Mediterranean seafloor. *Phys. Fluids*, 35, 026604. Featured and Scilight.
- Ayala Solares, H.A. et al. (incl. ANTARES-collaboration incl. H. van Haren), 2023. Search for gamma-ray and neutrino coincidences using HAWC and ANTARES data. *Astrop. J.*, 944, 166 (9 pp).
- van Haren, H., 2023. Internal tidal sloshing and a non-linear internal wave source away from topography. *Deep-Sea Res. I*, 196, 104021.
- van Haren, H., 2023. Sensitive temperature probes detail different turbulence processes in the deep Mediterranean. *Oceanography*, 36(1), 18-27.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2023. Search for neutrino counterparts to the gravitational wave sources from LIGO/Virgo O3 run with the ANTARES detector. *J. Cosm. Astrop. Phys.*, 04(2023)004.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2023. Probing invisible neutrino decay with KM3NeT-ORCA. *J. High Ener. Phys.*, 04 (2023) 090.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2023. First observation of the cosmic ray shadow of the Moon and the Sun with KM3NeT/ORCA. *Eur. Phys. J. C*, 83:344.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2023. Hint for a TeV neutrino emission from the Galactic Ridge with ANTARES. *Phys. Lett. B*, 841, 137951.
- van Haren, H., 2023. Unusual mooring oscillations: Apparent Foucault-Wheatstone device in the deep-ocean? *J. Mar. Sci. Eng.*, 11, 1087.
- van Haren, H., 2023. How and what turbulent are deep Mariana Trench waters? *Dyn. Atmos. Oc.*, 103, 101372.
- van Haren, H., 2023. KmT, detailing layered mixing governed by internal wave breaking. *Env. Fluid Mech.*, 23, 603-620.
- van Haren, H., 2023. Near-inertial wave propagation between stratified and homogeneous layers. *J. Oceanogr.*, 79, 367-377.
- Bolado-Penagos, M., I. Sala, J.J. Gomiz-Pascual, C.J. González, A. Izquierdo, Ó. Álvarez, Á. Vázquez, M. Bruno, H. van Haren, 2023. Analysis of internal soliton signals and their eastward propagation in the Alboran Sea: exploring the effect of subinertial forcing and fortnightly variability. *Progr. Oceanogr.*, 217, 103077.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2023. Review of the online analyses of multi-messenger alerts and electromagnetic transient events with the ANTARES neutrino telescope. *J. Cosm. Astrop. Phys.*, 08(2023) 072.
- van Haren, H., 2023. Detailing secondary frontal bore of internal tides breaking above deep-ocean topography. *J. Oceanogr.*, 79, 581-592.
- Reeb, N. et al. (ANTARES-collaboration incl. H. van Haren), 2023. Studying bioluminescence flashes with the ANTARES deep sea neutrino telescope. *Limnol. Oceanogr. Meth.*, 21, 734-760.
- van Haren, H., 2023. Direct observations of general geothermal convection in deep Mediterranean waters. *Ocean Dyn.*, 73, 807-825.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2024. Embedded software of the KM3NeT central logic board. *Comp. Phys. Comm.*, 296, 109036
- Unbehaun, T. et al. (incl. KM3NeT-collaboration incl. H. van Haren), 2024. Prospects for combined analyses of hadronic emission from γ -ray sources in the Milky Way with CTA and KM3NeT. *Eur. Phys. J. C*, 84, 112.
- van Haren, H., 2024. Internal wave convection and shear near the top of a deep equatorial seamount. *Pure Appl. Geophys.*, 181, 309-326.

- van Haren, H., G. Voet, M.H. Alford, B. Fernandez-Castro, A.C. Naveira Garabato, B.L. Wynne-Cattanach, H. Mercier, M.-J. Messias, 2024. Near-slope turbulence in a Rockall canyon. *Deep-Sea Res. I*, 206, 104277.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2024. Searches for neutrinos in the direction of radio-bright blazars with the ANTARES telescope. *Astrophys. J.*, 964, 3 (13 pp).
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2024. Searches for neutrino counterparts from gravitational waves from the LIGO/Virgo third observing run with KM3NeT. *J. Cosm. Astrop. Phys.*, 04(2024) 026.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2024. The power board of the KM3NeT Digital Optical Module: design, upgrade, and production. *Electronics*, 13, 2044.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2024. Differential sensitivity of the KM3NeT/ARCA detector to a diffuse neutrino flux and to point-like source emission: Exploring the case of the Starburst Galaxies. *Astrop. Phys.*, 162, 102990.
- Wynne-Cattanach, B.L., N. Couto, H.F. Drake, R. Ferrari, A. Le Boyer, H. Mercier, M.-J. Messias, X. Ruan, C.P. Spingys, H. van Haren, G. Voet, K. Polzin, A. Naveira Garabato, M.H. Alford, 2024. Observational evidence of diapycnal upwelling within a sloping submarine canyon. *Nature*, 630, 884-890.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2024. Search for neutrino emission from GRB 221009A using the KM3NeT ARCA and ORCA detectors. *J. Cosm. Astrop. Phys.*, 08(2024) 006.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2024. Atmospheric muons measured with the KM3NeT detectors in comparison with updated numeric predictions. *Eur. Phys. J. C*, 84, 696.
- van Haren, H., 2024. Intrusions and turbulent mixing above a small Eastern Mediterranean seafloor-slope. *J. Phys. Oceanogr.*, 54, 1807-1821.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2024. Constraints on the energy spectrum of the cosmic neutrino flux from the ANTARES neutrino telescope. *J. Cosm. Astrop. Phys.*, 08(2024) 038.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2024. Astronomy potential of KM3NeT/ARCA. *Eur. Phys. J. C*, 84, 885.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2024. Results of the follow-up of ANTARES neutrino alerts. *J. Cosm. Astrop. Phys.*, 09(2024) 042.
- Aiello, S. et al. (KM3NeT-collaboration incl. H. van Haren), 2024. Measurement of neutrino oscillation parameters with the first six detection units of KM3NeT/ORCA. *J. High-Ener. Phys.*, 10(2024), 206.
- Albert, A. et al. (ANTARES-collaboration incl. H. van Haren), 2025. Acoustic positioning for deep sea neutrino telescopes with a system of piezo sensors integrated into glass spheres. *Exp. Astron.*, 59, 6.

Book

- Vecchione, M., L. Allcock, I. Priede, H. van Haren, 2023. *The Deep Ocean: Life in the Abyss*. Princeton University Press, 288 pp.

Book chapters

- Holford, A. (on behalf of the KM3NeT consortium), H. van Haren, J. Craig and I.G. Priede, 2015. Sub-sea environmental observatory integrated with the KM3NET neutrino telescope infrastructure in the Mediterranean Sea. Ch. 14 in: *Seafloor Observatories: a new vision of the Earth from the abyss*, P. Favali, L. Beranzoli, and A. de Santis (eds), Springer-Praxis Books Geophysical Sciences, Berlin (D), 345-367.
- Bertin, V., J. Brunner, J. Carr, P. Coyle, C. Curtil, J.-J. Destelle, A. Deschamps, S. Escoffier, K. Graf, C. Gojak, J. Höbl, R. Lahmann, D. Lefèvre, C. Lévêque, C. Tamburini, J.-P. Schuller, H. van Haren, ANTARES collaboration, 2015. *ANTARES Neutrino*

- Telescope and deep-sea observatory. Ch. 15 in: *Seafloor Observatories: a new vision of the Earth from the abyss*, P. Favali, L. Beranzoli, and A. de Santis (eds), Springer-Praxis Books Geophysical Sciences, Berlin (D), 369-414.
- van Haren, H., 2016. Internal waves and bedforms. In: *Atlas of Bedforms in the Western Mediterranean*, J. Guillén, J. Acosta, S. Berné, F. Chiocci and A. Palanques (eds), Springer, Berlin (D), Ch. 5, 25-28.
- van Haren, 2018. High-resolution observations of internal wave turbulence in the deep ocean. In: *The Ocean in Motion: Circulation, waves, polar oceanography*, M.G. Velarde, R.Yu. Tarakanov, A.V. Marchenko (eds), Springer, Berlin (D), 127-146.

Unrefereed publications

- Li, H., J.J.M. van Haren, H.M. van Aken, 1989. Cluster analysis as a method to discriminate water masses in shelf seas. ICES C.M. Hydrography committee, C:3, 14 pp.
- van Haren, H., 2005. Shear, stratification and mixing in the North Sea. 9th Workshop on physical processes in natural waters, 4-6 September 2005, Lancaster University U.K. (ed. A. Folkard and I. Jones), 9-15.
- Maas, L. and H. van Haren, 2006. Worden mooi-weer verdrinkingen door dood-water veroorzaakt? *Meteorologica*, 15, 11-16 (in Dutch).
- van Haren, H., 2006. Inertial-tidal shear and internal wave band broadening in the ocean. 6th International Symposium on Stratified Flows 2006 (ISSF06), 11-14 December 2006, Perth, Australia (ed. G.N. Ivey), 710-715.
- Smit, M., H. van Haren, M. Laan, E. Keijzer, 2007. NIOZ Fast Thermistor String Model 3 for measuring internal waves. *Proceedings Oceans'07*, 18-21 June 2007, Aberdeen, Scotland, IEEE 1-4244-0635-8/07.
- van Haren, H., 2008. *Getijdencentrale*. *Texelse Courant*, 18 November, 3.
- van Haren, H., C. Millot, 2009. Local slantwise convection and deep inertial motions near a dense water formation area. *CIESM Workshop Monographs*, n°38: *Dynamics of Mediterranean deep waters*, Malta, 27 - 30 May 2009, 75-79.
- van Haren, H., 2010. Tidal power? No thanks. *New Scientist*, 3 April, 20-21.
- van Haren, H., 2012. Energieverlies door brekende interne golven in zee en oceaan. *Ned. Tijdschr. v. Nat.*, October 2012, 398-402 (in Dutch).
- van Haren, H., 2013. KM3NeT—building a cubic kilometre neutrino telescope in the deep Mediterranean Sea. *Hydro Intl.*, November/December, 20-23.
- van Haren, H., 2014. Vertical migration mysteries of deep-ocean plankton. *CELL-comment*, [http://www.cell.com/cell/comments/S0092-8674\(14\)00992-1](http://www.cell.com/cell/comments/S0092-8674(14)00992-1)
- van Haren, H., 2018. Pull of the tide. *New Scientist*, 23 June, 3183, 24-25.
- van Haren, H., 2020. Turbulentie in de diepe Middellandse Zee. *Ned. Tijdschr. v. Nat.*, 86 (Januari 2020), 24-29 (in Dutch).
- van Haren, H., 2020. Deep Mediterranean turbulent convection. *Europhys. News*, 51/2, 17-19.
- van Haren, H., 2022. Overzicht van de fysische oceanografie. *Ned. Tijdschr. v. Nat.*, 88(7, juli 2022), 8-11 (in Dutch).

Lecture Notes (readers)

- Haren, J.J.M. van, 1992. The measurement of currents at sea. Mooring design and current meter data analysis. UNESCO training workshop, Doha Qatar 1-9 November 1992, 30 pp.
- Haren, H. van, 1993. Zelf-registrerende meetinstrumenten in zee. Verankeringen en data-analyse. *Cursus praktische fysische oceanografie*, NIOZ Texel, 27 pp. (in Dutch)

Cruise reports

- van Haren, H. 1998. *PROcesses of Vertical Exchange in Shelf Seas (PROVCESS)*, MAST III Project # 96 1032, Northern North Sea experiment cruise N-3: R.V. Pelagia 19 – 30 October, 1998 (R.V. Pelagia cruise 64PE125). NIOZ, 32 pp.

- van Haren, H. 1999. PROcesses of Vertical Exchange in Shelf Seas (PROVCESS), MAST III contract # MAS3-CT97-0159, Southern North Sea experiment cruise S-1: R.V. Pelagia 29 March – 09 April, 1999 (R.V. Pelagia cruise 64PE136). NIOZ, 41 pp.
- van Haren, H. and W. van Raaphorst, 1999. PROcesses on the Continental Slope (PROCS), cruise PROCS99-1: R.V. Pelagia cruise 64PE137: R.V. Pelagia 14 April – 05 May, 1999. NIOZ, 43 pp.
- van Haren, H. 2002. ROCS, cruise ROCS02-1/2: R.V. Pelagia cruises 64PE198/201, ROCS02-1: 15-20 July, 2002, ROCS02-2: 29 August – 06 September, 2002. NIOZ, 31 pp.
- van Haren, H. 2003. LOCO-IW03, cruise LOCO03-Canary Basin: R.V. Pelagia cruise 64PE208, 06-19 March 2003. NIOZ, 30 pp.
- van Haren, H. 2004. LOCO-IW04-Canary Basin: R.V. Pelagia cruise 64PE231, 14 October-07 November 2004, NIOZ, 39 pp.
- van Haren, H. 2005. Towed ADCP-Bay of Biscay: R/V Pelagia cruise 64PE235, 20-27 April 2005, NIOZ, 15 pp.
- van Haren, H., 2006. Cruise report bsik/LOCO-IW06: R.V. Pelagia cruise 64PE248, 17 May - 12 June 2006, NIOZ, 40 pp.
- van Haren, H., 2007. Cruise report bsik/LOCO-IW07: R.V. Pelagia cruise 64PE279, 20 November - 16 December 2007, NIOZ, 48 pp.
- van Haren, H., 2009. Cruise report bsik/LOCO-IW09: R/V Pelagia cruise 64PE308, 21 June – 13 July 2009, NIOZ, 48 pp.
- van Haren, H., 2010. Cruise report KM3NeT09: R/V Pelagia cruise 64PE316, 13-19 December 2009, NIOZ, 27 pp.
- van Haren, H., 2011. Cruise report KM3NeT11: R/V Meteor cruise M83/4, 24 January-06 February 2011, NIOZ, 41 pp.
- van Haren, H., 2013. Cruise report KM3NeT13: R/V Pelagia cruise 64PE367, 02-15 April 2013, NIOZ, 25 pp.
- van Haren, H., 2014. Cruise report KM3NeT14: R/V Pelagia cruise 64PE389, 06-11 June 2014, NIOZ, 21 pp.
- van Haren, H., 2015. Cruise report PRT13: R/V Pelagia cruises 64PE380 (December 2013) and 64PE396 (February 2015), NIOZ, 5 pp.
- van Haren, H., 2020. Cruise report 3D-T: R/V Pelagia cruise 64PE478 (08-13 October 2020) and R/V Pourquoi pas ? cruise 3D-T_ROV (18-20 November 2020), NIOZ, 32 pp.
- van Haren, H., 2024. Cruise report MED24: R/V Pelagia cruise 64PE532 (25 February-06 March 2024), NIOZ, 18 pp.

Public Outreach

- Cover Geophysical Research Letters, vol. 37 #3, 2010.
- Deep Ocean Waves Break on Sea Floor, Discovery News, 31 March 2010.
- Hoe?Zo! Radio, Radio5 interview 1 April 2010.
- In deep sea, waves with a familiar curl, New York Times, D3, 20 April 2010.
- Disco in de diepzee, Quest, 22-26, 20 April 2010.
- Slingerbewegingen in de diepten van de ocean; Kennis uit de hangmat: golven voelen, de Volkskrant, p. 33, 28 July 2012.
- New explanation for Earth's biggest migration, Inside Science News Service, 20 October 2014.
- Cover Geophysical Research Letters, vol. 41 #23, 2014.
- Deep Atlantic conduit boasts longest billow train, EOS Research Spotlight, 06 May, 2015.
- Amazing waves discovered in deep-ocean trench, LiveScience, 15 May, 2015.
- Kabel naar de diepste diepzee, de Volkskrant, 38-41, 03 December 2016 (in Dutch).
- Marianen Trog, Vroegge Vogels, VARA-radio 1, 08 Januari 2017 (in Dutch).
- Interview-reaktie op nieuwe methode plasticverwijdering uit zee, de Volkskrant, 11 May 2017 (in Dutch).
- Cover Deep-Sea Research I, vol. 129, November 2017.

Marianentrog slokt levenswerk oceanograaf op. De Volkskrant, 27, 12 December 2018 (in Dutch).

De zee gaf geen sjoege; column Bert Wagendorp. De Volkskrant, 2, 13 December 2018 (in Dutch).

Drama in de Marianentrog. Vroege Vogels, BNNVARA-radio 1, 16 December 2018 (in Dutch).

Brekende golven op onderzeese bergen. Oceanografen brengen fysische processen rond Sababank in kaart. NEMO Kennislink, 29 January 2019 (in Dutch).

Diepste duik ooit. Bert op 5, NPO5 radio, 14 May 2019 (in Dutch).

Diepstezeevissen. De Volkskrant, 19-21, 30 November 2019 (in Dutch).

Marianentrog. Vroege Vogels, BNNVARA-radio 1, 01 December 2019 (in Dutch).

Hoogtepunten op gote diepte. Texelse Courant, 6, 06 December 2019 (in Dutch).

Mensen die in 2019 iets bijzonders ‘maakten’. Radio Eenvandaag, 25 December 15-16 uur 2019 (in Dutch).

Cover Europhysics News, vol. 51/2, 2020.

Met drieduizend thermometers op zoek naar onderwatergolven. NRC, E10, 05 May 2020 (in Dutch).

Branding in de diepzee. De Ingenieur, 132(6), 22-24, June 2020 (in Dutch).

Turbulentie in de diepzee. Noord-Hollands Dagblad/Helderse Courant, Cover&R10-11, 15 Augustus 2020 (in Dutch).

Onderwatergolven. Vroege Vogels, BNNVARA-radio 1, 23 Augustus 2020 (in Dutch).

Cover Deep-Sea Research I, vol. 165, November 2020.

NIOZ begint ‘t echte meten, op zeebodem. Noord-Hollands Dagblad/Helderse Courant, 29 (R9), 01 December 2020 (in Dutch).

Ik droomde van een woud van sensoren in zee, Werkplek om van te dromen. Nederlands Tijdschrift voor Natuurkunde, 87(3, ‘Robbert’), 30, March 2021 (in Dutch).

NTR-Klokhuis, De Oceanen (episode 3): Diepzeedonderzoek, NPO-ZAPP dutch television, 14 April 2022 (in Dutch).

J. Kusters: Fellerie buien, harde wind: Wat klimaatverandering betekent voor zeilers. Zeilen, december 2024 (in Dutch).

Published on internet (unrefereed)

van Haren, H., L.J.A. Gerringa, Weighing the scientific weight factor, June 2013.

van Haren, H. Humpback whale migration affected by internal wave surfing and mixing? Comment to Roy. Soc. Open Sci. publ., January 2016.

van Haren, H. Plastic nuance (in nederlands), September 2018.

van Haren, H., 2022. A note on the use of equidistant contours for presenting scientific data (Comment on Crameri, F., G. E. Shephard, and P. J. Heron, 2020: The misuse of colour in science communication. Nat. Comm., 11, 5444).

van Haren, H., 2023. Why the Atlantic meridional overturning circulation may not collapse. <https://arxiv.org/abs/2311.06274>.