# CURRICULUM VITAE

# PERSONAL DATA:

Name:	O'Neill, Michael Davlin
Born:	July 9, 1967
	Lompoc, California
Address:	Dept. of Mathematics
	Claremont McKenna College
	Claremont,CA 91711
Tel:	(909) 607-8336
email:	moneill@cmc.edu

## **EDUCATION:**

Ph.D.	UCLA, Mathematics (Classical Analysis)	1995
B.A.	Harvard University, Mathematics and Physics	1989

## **PROFESSIONAL EXPERIENCE:**

Fall 2014- Present	Claremont McKenna College,
	Professor
Spring 2013	On leave
Fall 2009-Fall 2012	Claremont McKenna College,
	Chair of the Department of Mathematics
Fall Semester 2008	Claremont McKenna College,
	Chair of the Department of Mathematics
Fall 2007- Present	Claremont McKenna College,
	chair of the Institutional Review Board
2003-Present	Claremont McKenna College, Associate Professor
2000-2003	Claremont McKenna College, Assistant Professor
2001	Institut Mittag Leffler, Visiting Researcher
1995-2000	University of Texas at El Paso, Assistant Professor
1989 - 1995	UCLA, Teaching and Research Assistant

# **TEACHING EXPERIENCE:**

Undergraduate: Game Theory, Additive number theory, Calculus and Analytic Geometry, Multivariable Calculus, Ordinary Differential Equations, Complex Variables, Matrix Algebra, Introduction to Analysis, Transition to Upper Division Mathematics, Precalculus, Upper Division Algebra, Partial Differential Equations, Applied Combinatorics, Probability (with calculus prerequisite), Statistical Inference (Mathematical Statistics course with Data Analysis using R), Stochastic Processes

Graduate: Real Analysis, Fourier Analysis , Analysis and Probability.

## Teaching experience since 2012 at CMC

Fall 2022 188/32/151 188 = Game theory 32 = 3rd semester calculus 151 =upper division probability Spring 2022  $131/151 \ 131 =$  Principles of Analysis Fall 2021 31/31/131 31 = 2nd semester calculus Spring 2021 138 on line 138 = 2nd semester graduate analysis Fall 2020 31/31/135/199. 135= undergraduate complex analysis 199=independent study/thesis student Spring 2020 30/131 Fall 2019 31/135 Spring 2019 30/31/199 Fall 2018 30/30/199. 30= first semester calculus Spring 2018. 60/131 60 = undergraduate linear algebra Fall 2017. 30/31 Spring 2017. 131/138 Fall 2016. 31/60 Spring 2016. 32/135 Fall 2015. 32/60 Spring 2015 31/131 Fall 2014 31/31Spring 2014 31/31 Fall 2013 31/31 Spring 2013 31/31 Fall 2012. on leave Spring 2012. on 111/188 111= ordinary differential equations 188 = gametheory Fall 2011 30/135 Spring 2011 131/152. 152 = Statistical inference Fall 2010 30/60/151 Fall 2009 32/32H/151

### Teaching and service experience prior to 2013

Spring 2013 On leave
Fall 2009-Fall 2012 Claremont McKenna College,
Chair of the Department of Mathematics
Fall Semester 2008 Claremont McKenna College,
Chair of the Department of Mathematics
Fall 2007- 2012 Claremont McKenna College,
chair of the Institutional Review Board
2013-Present Claremont McKenna College, Associate Professor
2003-2013 Claremont McKenna College, Associate Professor
2000-2003 Claremont McKenna College, Assistant Professor
2001 Institut Mittag Leffler, Visiting Researcher
1995-2000 University of Texas at El Paso, Assistant Professor
1989 - 1995 UCLA, Teaching and Research Assistant

#### **PUBLICATIONS IN REFEREED JOURNALS:**

- (1) Michael D. O'Neill, "The convex hull of the interpolating Blaschke products", Michigan Math. J. 44(1997) no.3.
- (2) Michael D. O'Neill, "J.E. McMillan's area theorem", Colloq. Math. 79 (1999), no.2. 229–234.
- (3) Michael D. O'Neill, "Random walk and the boundary behavior of Bloch functions", Houston J. Math. 25 (1999), no.2,379-386.
- (4) Michael D. O'Neill, "Anderson's conjecture for domains with fractal boundary", Rocky Mountain Math. J. 30 (2000), no. 1, 341-352.
- (5) Michael D. O'Neill and Robert E. Thurman, "Extremal domains for Robin capacity", Complex Variables Theory Appl. 41 (2000), no.1, 91-109.
- (6) M.A. Khamsi, H. Knaust, M.D. O'Neill, N.T. Nguyen "Lambda hyperconvexity in metric spaces", Nonlinear Anal. 43 (2001),no.1, 21-31.

- (7) Michael D. O'Neill and Robert E. Thurman, "A problem of McMillan on conformal mappings", Pacific J. Math. 197 (2001), no.1,145-150.
- (8) Michael D. O'Neill, "Extremal domains for the geometric reformulation of Brennan's conjecture", Rocky Mountain J. Math. 30 (2000) no.4, 1481-1501.
- (9) Michael D. O'Neill, "Vertical variation of harmonic functions in upper half spaces", Colloq. Math. 87 (2001), no.1, 1-12.
- (10) Michael D. O'Neill and Robert E. Thurman, "McMillan's area problem", Michigan Math. J. 47 (2000), no. 3, 613-620.
- (11) Massimo Furi, Mario Martelli, Mike O'Neill and Carolyn Staples, "Chaotic orbits of a pendulum with variable length", Electronic J. Differential Equations. 47 (2004), no. 36, 14pp.
- (12) Eva Nazarevicz, Mike O'Brien, Mike O'Neill and Carolyn Staples, "Equality in Pollard's theorem on addition of congruence classes", Acta Arith. 127 (2007), 1-15
- (13) Massimo Furi, Mario Martelli, Mike O'Neill, "Global stability of equilibria", J. Difference Equ. Appl. 15 (2009), no. 4, 387-397.
- (14) Michael D. O'Neill, "A Green proof of Fatou's theorem", Journal of Statistical Theory and Practice. 5 (2011), no. 3, 497-512.
- (15) Michael D. O'Neill, "A geometric and stochastic proof of the twist point theorem", Publicacions Matematiques. 56 (2012), no. 1, 41-63.
- (16) Jorge Aarao and Michael D. O'Neill, "Sharp estimates in some inequalities of Zygmund type for Riesz Transforms", Proc. Amer. Math. Soc. 140 (2012); no.12 4227-4233.

### Selected invited lectures:

- (1) "Additive number theory for undergraduates", Summer REU program at the Claremont Colleges, 2007.
- (2) "Undergraduate research in additive number theory", MAA MathFest, San Jose, August 2007

- (3) "Scary Boundaries", Claremont Colleges Mathematics colloquium, October 2007
- (4) "Boundary behavior of harmonic functions and Brownian motion", Special session on applications of stochastic processes. AMS sectional meeting UC Riverside, November 2009.
- (5) "Sharp inequalities of Zygmund type for Riesz transforms", Special session on mathematical models of random phenomenon. AMS sectional meeting UC Los Angeles, October 2010.
- (6) "Surreal numbers and combinatorial games.", Claremont Gateway to Exploring Mathematical Sciences Program, November 2010.
- (7) "Sharp inequalities and the colloquium of Christ", Claremont analysis seminar, November 2011.

## **SERVICE:**

After 2013:

member of Committee on Academic computing 4 years between 2013 and 2022 member of several departmental hiring committees member of APT committee

Prior to 2013

Chair of the Claremont McKenna College Department of Mathematics, Fall Semester 2008 and Fall 2009 to Spring 2012

Chair of the Institutional Review Board of Claremont McKenna College, Fall 2007 to Spring 2012

Member of the Claremont McKenna College Administration Committee, Fall 2011 to Spring 2012

AMS Representative to the MAA committee on undergraduate curriculum. Member of the special sub-committee on curiculum in probability, 2012

Organizer of the Claremont Analysis seminar, 2007-2009

Organizer of the Atul Vyas Memrial lecture, annually since 2008 until 2013. Regular Referee for several mathematical journals.