

# Dylan Murphy

## Curriculum Vitae

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📄 mpdylan.github.io

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### Personal Information

Full name Dylan Joseph Murphy  
Born October 17, 1987 (Arizona, USA)  
Citizenship USA

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### Education

2006–2010 **S.B., Mathematics, Physics**, *University of Chicago*, Chicago, Illinois.  
2010–present **Ph.D. Candidate, Mathematics**, *University of Arizona*, Tucson, Arizona.

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### Research Interests

- Discrete and continuous integrable systems
- Orthogonal polynomials on the real line and unit circle
- Asymptotic analysis of Riemann-Hilbert problems

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### Seminar Talks

Sep. 2, 2014	Tridiagonal matrix models and stochastic operators	<i>UA Mathematics Analysis, Dynamics, and Applications Seminar</i>
Apr. 22, 2015	Random orthogonal polynomials on the line and the circle	<i>UA Mathematics Mathematical Physics and Probability Seminar</i>
Nov. 10, 2015	Difference equations and scattering problems for orthogonal polynomial recurrence coefficients	<i>UA Mathematics Analysis, Dynamics, and Applications Seminar</i>
Apr. 27, 2016	Darboux transformations: from continuous to discrete	<i>UA Mathematics Mathematical Physics and Probability Seminar</i>
Oct. 9, 2016	Geometry of discrete Schrödinger operators	<i>AMS Western Sectional Meeting Special Session on Integrable Systems and Soliton Equations (invited)</i>

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### Fellowships and Awards

Fall 2014 U. of Arizona Mathematics Department VIGRE Fellowship  
2016 U. of Arizona College of Science Galileo Circle Scholar

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## Teaching

As Graduate Teaching Assistant/Associate at U. of Arizona:

Math 112	College Algebra	<i>Spring 2011, Summer 2015 (online)</i>
Math 120R	Precalculus	<i>Fall 2011, Spring 2012, Summer 2012</i>
Math 122B	Calculus I	<i>Fall 2012</i>
Math 129	Calculus II	<i>Spring 2013, Fall 2013, Spring 2014, Spring 2015</i>
Math 196N	Calculus II Problem Solving Workshop	<i>Fall 2013</i>
Math 196V	Calculus III Problem Solving Workshop	<i>Spring 2014</i>
Math 263	Introduction to Statistics and Biostatistics	<i>Fall 2015, Spring 2016</i>

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## Service

2014–2016	U. of Arizona Mathematics Graduate Student Colloquium	<i>Organizer</i>
2013, 2015	U. of Arizona Mathematics Integration Workshop for new graduate students	<i>Graduate Assistant</i>
2014	U. of Arizona Mathematics Department Summer qualifying exam sessions	<i>Senior Graduate Instructor, Geometry/Topology</i>

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## Other Skills

Software	Python (NumPy/SciPy), Julia, C, C++, R, MATLAB, L <sup>A</sup> T <sub>E</sub> X
Languages	English (native), Esperanto (intermediate), Japanese (basic)