

Tom VandenBoom

CONTACT INFORMATION	Rice University MS-136, Box 1892 Houston, TX 77251-1892	651-494-7824 tv4@rice.edu
RESEARCH INTERESTS	Completely integrable systems, spectral theory, Jacobi operators, Schrödinger operators, canonical systems, dynamical systems.	
EDUCATION	Rice University , Houston, TX Ph.D., Mathematics, <i>Expected</i> : May 2018 University of Minnesota , Minneapolis, MN B.S., Mathematics and Statistics (Double Major), May 2013 <ul style="list-style-type: none">• <i>Summa Cum Laude</i>, with distinction.	
PUBLICATIONS	<ol style="list-style-type: none">1. VandenBoom, T. “Reflectionless discrete Schrödinger operators are spectrally atypical.” <i>Comm. Math. Phys.</i>, to appear.2. Binder, I., Damanik, D., Lukic, M., and VandenBoom, T. “Almost-periodicity in time of solutions of the Toda lattice.” <i>C. R. Math. Rep. Acad. Sci. Canada</i>, to appear.	
SUBMITTED ARTICLES	<ol style="list-style-type: none">1. Fillman, J., Ong, D., and VandenBoom, T. “Spectral approximation for ergodic CMV operators with an application to quantum walks.”2. Bucaj, V., Damanik, D., Fillman, J., Gerbuz, V., VandenBoom, T., Wang, F., and Zhang, Z. “Localization for the one-dimensional Anderson model via positivity and large deviations for the Lyapunov exponent.”	
ARTICLES IN PREPARATION	<ol style="list-style-type: none">1. Eichinger, B., VandenBoom, T., and Yuditskii, P. “KdV hierarchy via Abelian coverings and operator identities.”	
PRESENTATIONS AND CONFERENCES	Presentations Given	
	<ul style="list-style-type: none">• TexAMP 2017, Austin TX• Mini-Workshop on Reflectionless Operators, Oberwolfach, Germany• Great Lakes Mathematical Physics Meeting 2017, Lansing, MI• TexAMP 2016, Houston, TX• Simons Center for Geometry and Physics (<i>Video Available</i>)• University of Missouri• University of Alabama Birmingham• Western States Meetings 2016• University of Oklahoma• EquaDiff 2015	Nov 2017 Oct 2017 Jun 2017 Oct 2016 Jun 2016 May 2016 Mar 2016 Feb 2016 Aug 2015 Jul 2015
	Other Mathematics Conferences Attended	
	<ul style="list-style-type: none">• Frontiers in Mathematical Physics, Montreal, Canada• TexAMP 2015, Dallas, TX• TexAMP 2014, Austin, TX• Inverse Problems and Spectral Theory, College Station, TX	Aug 2016 Oct 2015 Nov 2014 Oct 2014

TEACHING
EXPERIENCE

Instructor
Rice University
MATH 102 - Calculus II Spring 2016

Teaching Assistant
Rice University
MATH 523 - Functional Analysis Fall 2017
MATH 211 - Ordinary Differential Equations Spring 2017
MATH 355 - Linear Algebra Fall 2016
MATH 523 - Functional Analysis Fall 2015
MATH 302 - Elements of Analysis Spring 2015
MATH 300 - Fractal Geometry Fall 2014
MATH 211 - Ordinary Differential Equations Spring 2014
MATH 102 - Calculus II Fall 2013

University of Minnesota
MATH 1031 - College Algebra and Probability Fall 2012 - Spring 2013

SERVICE

Graduate Mentor, Rice Geometry Lab Spring 2017

- Guided undergraduates in exploration of long-time asymptotics of various Hamiltonian systems.

Graduate Student Coordinator, Rice University Fall 2015 - Spring 2017

- Assigned and coordinated teaching assistant duties and office spaces for mathematics graduate students.

Lecturer, Rice Math Circle Nov 2014

- Prepared and presented class discussion and related activities for local youth.

Master of Ceremonies, Rice Mathematical Lecture Contest Apr 2014

- Coordinated event logistics and introduced speakers.