

Frank Patane

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EDUCATION

- May 2015 Ph.D. in Mathematics, **University of Florida**
Thesis: “On Representations by Quadratic Forms in Two and Three Variables”
Adviser: Alexander Berkovich
- December 2008 M.S. in Mathematics, **University of Florida**
- May 2007 B.S. in Mathematics, **Lafayette College**

RESEARCH INTERESTS

- Number Theory
- Binary and Ternary Quadratic Forms
 - Theta Series
 - Eta-Quotients

PUBLICATIONS

1. F. Patane, On a Generalized Identity Connecting Theta Series Associated with Discriminants Δ and Δp^2 . *Acta Arithmetica*. **176**, (2016), 343–364.
2. F. Patane, An Identity Connecting Theta Series Associated with Binary Quadratic Forms of Discriminant Δ and $\Delta(\text{prime})^2$. *J. Number Theory* **156**, (2015), 290–316.
3. A. Berkovich, F. Patane, Essentially Unique Representations by Certain Ternary Quadratic Forms. *Experimental Mathematics* **24**, (2015), 290–316.
4. A. Berkovich, F. Patane, Binary Quadratic Forms and the Fourier Coefficients of Certain Weight 1 *eta*-Quotients. *Journal of Number Theory* **135**, (2014), 185–220.

AWARDS/HONORS

- ASPIRE Undergraduate Research Award (Summer 2016)
- Project NExT Fellow (2015-2016)
- Neil White Excellence in Teaching Award (Spring 2015)
- University of Florida Graduate Student Council Travel Grant (Fall 2014)
- University of Florida Graduate Student Teaching Award (Spring 2014)
- University of Florida Mathematics Department Teaching Award (Spring 2014)
- University of Florida Center for Applied Mathematics Travel Grant (Fall 2013)

SELECT TALKS

- *Figurate Numbers and Quadratic Forms*, Math Colloquium Talk, University of North Alabama, April 2017
- *Undergraduate Research in my First Year as a Faculty Member*, MAA SE Section 96th Meeting, Mercer University, March 2017
- *Converging Infinite Series*, Pi Mu Epsilon Talk, Samford University, April 2016
- *An Identity Connecting Theta Series Associated with Binary Quadratic Forms of Discriminant Δ and Δp^2* , International Number Theory Conference (Alladi 60th), University of Florida, March 2016
- *Sums of Squares and Beyond*, Kappa Mu Epsilon Colloquium Talk, Birmingham-Southern College, October 2015
- *Essentially Unique Representations by Certain Ternary Quadratic Forms*, Joint Math Meetings, San Antonio, January 2015
- *An Identity Connecting Theta Series Associated with Binary Quadratic Forms of Discriminant Δ and Δp^2* , U.S.C., Palmetto Number Theory Series XXIII, December 2014
- *A Tour of Binary Quadratic Forms*, University of Florida, Undergraduate Math Seminar, November 2014
- *Essentially Unique Representations by Certain Ternary Quadratic Forms*, S.C. State University, Palmetto Number Theory Series XXII, September 2014
- *Effective Time Management Strategies for Graduate School*, Invited Panelist, University of Florida, Graduate Student Orientation, August 2014
- *Relating Binary Quadratic Forms to Weight 1 Eta-Quotients*, Clemson University, Palmetto Number Theory Series XXI, December 2013

CONFERENCES

- *MAA SE Section 96th Meeting*, Gave Talk, Facilitated Treasure Hunt/Jeopardy, Judged poster session, Mercer University, March 2017
- *AACTM 2017*, Organizer and 1st “Member at Large”, Samford University, February 2017
- *Mathfest 2016* Project NExT, Judged Paper Sessions, Columbus OH, August 2016
- *International Number Theory Conference (Alladi 60th)*, Gave Talk, University of Florida, March 2016
- *MAA SE Section 95th Meeting*, Facilitated Treasure Hunt, Chair/Judge 2 paper sessions, University of Alabama Birmingham, March 2016
- *AACTM 2016*, Inducted as 2nd “Member at Large”, University of Auburn Montgomery, February 2016
- *Joint Mathematic Meetings 2016* Project NExT, Judged Poster Session, Seattle, January 2016
- *Mathfest 2015* Project NExT, Washington DC, August 2015

TEACHING EXPERIENCE

SAMFORD UNIVERSITY

Fall	2017	Calculus I, Linear Algebra
Summer	2017	Calculus I
Spring	2017	Precalculus, Number Theory
Jan	2017	Calculus I
Fall	2016	Precalculus, Abstract Algebra
Summer	2016	Calculus I, ASPIRE Undergraduate Research
Spring	2016	Precalculus, Differential Equations, Number Theory Independent Study
Fall	2015	Precalculus, Linear Algebra

UNIVERSITY OF FLORIDA

Spring	2015	Analytic Geometry and Calculus I for Engineers
Fall	2014	Analytic Geometry and Calculus I for Engineers
Summer	2014	Elementary Differential Equations
Spring	2014	Analytic Geometry and Calculus I for Engineers
Fall	2013	Analytic Geometry and Calculus I
Summer	2013	AIM Precalculus: Algebra and Trigonometry
Spring	2013	Analytic Geometry and Calculus II
Fall	2012	Precalculus: Algebra and Trigonometry
Summer	2012	Mathematics for Liberal Arts Majors 2
Spring	2012	Analytic Geometry and Calculus II
Fall	2011	Analytic Geometry and Calculus II
Summer	2011	Precalculus: Algebra
Spring	2011	Analytic Geometry and Calculus II
Fall	2010	Calculus II for Advanced Placement Students
Summer	2010	Precalculus: Algebra and Trigonometry
Spring	2010	Trigonometry
Fall	2009	Analytic Geometry and Calculus I
Summer	2009	Precalculus: Algebra and Trigonometry
Spring	2009	Analytic Geometry and Calculus I
Fall	2008	Survey of Calculus I
Summer	2008	Survey of Calculus I
Spring	2008	Survey of Calculus I
Fall	2007	Precalculus: Algebra