

THE UNIVERSITY OF BRITISH COLUMBIA

Curriculum Vitae for Faculty Members

Date: March 31, 2016 **Initials:** MP

1. **SURNAME:** Pramanik **FIRST NAME :** Malabika
MIDDLE NAME(S):
2. **DEPARTMENT/SCHOOL:** Mathematics
3. **FACULTY:** Science
4. **PRESENT RANK:** Associate Professor **SINCE:** July 1, 2011
5. **POST-SECONDARY EDUCATION**

(a) *Degrees:*

University or Institution	Degree	Subject Area	Dates
University of California, Berkeley	Ph.D.	Mathematics	May 2001
Indian Statistical Institute, Bangalore	M.Stat.	Statistics	May 1995
Indian Statistical Institute, Calcutta	B.Stat.	Statistics	May 1993

(b) *Related studies:*

(c) *Title of Dissertation and Name of Supervisor:*

Title: "Weighted integrals in \mathbb{R}^2 and the maximal conjugated Calderón-Zygmund operator"
Supervisor: F. Michael Christ (University of California at Berkeley).

(d) *Special Professional Qualifications:*

6. **EMPLOYMENT RECORD**

(a) *Prior to coming to UBC:*

University, Company or Organization	Rank or Title	Dates
California Institute of Technology, Pasadena, CA	Fairchild Senior Research Fellow	2005–2006
University of Rochester, Rochester, NY	Visiting Assistant Professor	Fall 2004
University of Wisconsin, Madison, WI	Van Vleck Assistant Professor	2001–2004

(b) *At UBC:*

Rank or Title	Dates
Tenure-track Assistant Professor	July 17, 2006 - June 30, 2011
Associate Professor	July 1, 2011 - present

(c) *Date of granting of tenure at UBC:* July 1, 2011

7. **LEAVES OF ABSENCE**

University, Company or Organization at which leave was taken	Type of leave	Dates
University of British Columbia	Parental leave	2010 WT1
University of British Columbia	Sabbatical leave	July 2013-June 2014
Indian Institute of Science, Bangalore	Sabbatical leave	July-August 2013
Beijing Normal University, China	Sabbatical leave	March 2014

8. TEACHING

(a) *Areas of special interest and accomplishments:* “Know your audience” is the tenet of my teaching philosophy. A course taught for engineers, medical students or business majors should showcase mathematics as a powerful tool in our problem-solving arsenal, whether in building bridges, battling bacteria or predicting economic trends. Real-world applications are paramount in structuring such a course. In contrast, an advanced honours course emphasizes abstraction, highlighting the precision of logic and proofs. Ensuring effectiveness and accessibility while responding to diverse student communities and course demands can be challenging. For large lectures, I use emerging online technologies to promote greater interaction. For smaller, specialized courses, a traditional lecturing format with group work seems more appropriate. Regardless of superficial differences, I want students to take away from my course not merely an enriched toolkit of techniques but a true appreciation of mathematics as a language of science and one of the pinnacles of intellectual virtuosity known to man.

(b) *Courses taught at UBC:*

Session	Course number	Scheduled hours	Class size	Hours taught			
				Lecture	Tutorial	Lab	Office Hour
2006W Term 1	MATH 253 Multivariable Calculus	MWF 9-10	15	3			3
2006W Term 2	MATH 421/510 Functional Analysis	MWF 9-10	8	3			3
2007W Term 1	MATH 542 Harmonic Analysis	MWF 11-12	7	3			3
2007W Term 1	MATH 320 Real Analysis I	MWF 9-10	50	3			3
2007W Term 2	MATH 421/510 Functional Analysis	MWF 9-10	6	3			3
2008W Term 1	MATH 263 Multivariable Calculus	MW 10-11 F 9-11	110	4			3
2008W Term 1	MATH 440/508 Complex Analysis	MWF 11-12	10	3			3
2008W Term 2	MATH 421/510 Functional Analysis	MWF 9-10	15	3			3
2009W Term 1	MATH 217 Multivariable & Vector Calculus	TuTh 9:30-11 F 9-10	64	4			3
2009W Term 2	MATH 121 Honors Integral Calculus	MTuWF 2-3	43	4			3
2009W Term 2	MATH 620E Reading course	F 9-11	2				
2010W Term 2	MATH 105 Integral Calculus	MWF 9-10	220	3			3
2011W Term 1	MATH 440/508 Complex Analysis	MWF 11-12	20	3			3
2011W Term 2	MATH 321 Real Analysis II	MWF 9-10	40	3			3
2011W Term 2	MATH 105 Integral Calculus	MWF 4-5	120	3			3
2012W Term 1	MATH 440/508 Complex Analysis	MWF 11-12	10	3			3
2012W Term 1	MATH 541 Harmonic Analysis I	MWF 2-3	9	3			3
2012W Term 2	MATH 542 Harmonic Analysis II	TuTh 11-12:30	3	3			3
2013S Term 1	MATH 200 Multivariable Calculus	TuThF 4-6, W 5-6	103	7			3

2013S Term 1	MATH 253 Multivariable Calculus	TuThF 4-6, W5-6	82	7	3
2013W Term1	MATH 449D Fourier Analysis	MW 4-5	1	2	0
2014W Term 1	MATH 440/508 Complex Analysis	MWF 11-12	19	3	3
2014W Term 2	MATH 300 Introduction to Complex Variables	MWF 1-2	76	3	3
2014W Term 2	MATH 321 Real Variables II	MWF 9-10	32	3	3
2015 S Term 1	MATH 215/255 Differential Equations	MTuF 1-3 W 1-2	150	3	3
2015W Term 2	MATH 121 Honours Integral Calculus	MTuWF 2-3	35	4	3
2015W Term 2	MATH 541 Harmonic Analysis I	MWF 11-12	9	3	3

(c) *Students and postdoctoral scholars supervised and/or co-supervised:* My role as supervisor or co-supervisor consists of the following duties:

- offering consistent direction and supervision of student's research, in regular weekly meetings and seminars,
- frequent feedback regarding academic progress,
- guidance in meeting degree requirements and program timelines,
- providing financial support where necessary,
- advising on future career prospects,
- helping facilitate professional development.

Undergraduate advisees	Program type	Year		Supervisory Role
		Start	End	
Michael Lindstrom	NSERC USRA	05/2007	08/2007	Supervisor
Tristan Collins	NSERC USRA	05/2008	08/2008	Supervisor
Hannah Cairns	NSERC USRA	05/2009	08/2009	Supervisor
Curt Da Silva	NSERC USRA	05/2010	08/2010	Co-supervisor (With Mahta Khosravi)
Kevin Luk	NSERC USRA	05/2010	08/2010	Co-supervisor (With Mahta Khosravi)
David Solymosi	NSERC USRA	05/2011	08/2011	Supervisor
Ruiyuan Chen	NSERC USRA	05/2012	08/2012	Co-supervisor (With Akos Magyar)
Karlming Chen	NSERC USRA	05/2012	08/2012	Co-supervisor (With Akos Magyar)
Polly Yu	Directed study	09/2013	12/2013	Instructor
Jasmine (Yu Ming) Yang	Directed study	05/2015	08/2015	Co-supervisor (With Shawn Desaulniers)
Foster Tom	NSERC USRA	05/2015	08/2015	Supervisor
Ningfei Shen	Directed study	01/2016	04/2016	Instructor
Hong Zhe (Vincent) Chen	NSERC USRA	05/2016	08/2016	Supervisor

Clarification regarding NSERC USRA: USRA, which stands for "Undergraduate Student Research Awards", are awarded by the Natural Sciences and Engineering Research Council (NSERC) of Canada to stimulate undergraduate student interest in natural sciences and engineering. Providing research work experience that complements regular undergraduate studies in an academic setting, these awards are also meant to encourage students to undertake graduate studies and pursue a research career in these fields. Partial financial support is given by NSERC to each award recipient during the summer through a host university; the remainder of the support is covered by the research supervisor. In the Department of Mathematics at UBC, about 7-10 USRA positions are awarded each year, out of an applicant pool of size 45-50.

Current positions of undergraduate advisees:

1. *Michael Lindstrom* went on to receive an M.Sc. and then a Ph.D. degree in applied mathematics from University of British Columbia. He graduated in 2015, with a graduate student research award given by the UBC Department of Mathematics for “best dissertation in applied mathematics”. He will join the Department of Mathematics at University of California Los Angeles as a postdoctoral researcher in the fall semester of 2015.
2. *Tristan Collins* was awarded the G.C. Webber Memorial Prize for excellence in mathematics by the Department of Mathematics at the University of British Columbia. He received his Ph.D. in mathematics from Columbia University in New York, where he was the recipient of a doctoral postgraduate scholarship from the Natural Sciences and Engineering Research Council of Canada (NSERC) and a Presidential Fellowship. He is currently a Benjamin Peirce Assistant Professor in mathematics at Harvard University.
3. *Hannah Cairns* obtained her M.Sc. in mathematics from the University of British Columbia and is now pursuing a Ph.D. degree in the same subject at Cornell University.
4. *Curt Da Silva* completed his M.Sc. from the Department of Earth, Ocean and Atmospheric Sciences at the University of British Columbia, where he is now pursuing his Ph.D.
5. *Kevin Luk* obtained his M.Sc. in mathematics from the University of Toronto. He is now pursuing his Ph.D. degree at the same department.
6. *David Solymosi* is a graduate student in computer science at the University of Toronto.
7. *Ruiyuan Chen* won the Governor General’s Silver Medal in 2012 from the University of British Columbia for being the “top graduate in the Faculty of Science”, a Reginald Palliser-Wilson scholarship and the R.D. James Medal as the “top graduate in honours mathematics”. He was the top member of the UBC Putnam team in 2011. He is now pursuing a Ph.D. degree in mathematics at the California Institute of Technology (Caltech) in Pasadena, CA.
8. *Karlming Chen* received a Reginald Palliser-Wilson scholarship in 2012, and is currently a graduate student in mathematics at the California Institute of Technology (Caltech) in Pasadena, CA.
9. *Polly Yu* went on to earn a Masters in Mathematics degree from the University of Waterloo. She is currently pursuing her Ph.D. at the University of Wisconsin, Madison.
10. *Ningfei Shen* will join the master’s program in operations research at UBC starting fall of 2016.

Graduate advisees	Program type	Year		Supervisory Role
		Start	End	
Edward Kroc	M. Sc.	05/2009	08/2010	Supervisor
Marc Carnovale	M. Sc.	09/2010	04/2013	Co-supervisor (With Izabella Lába)
Vincent Chan	Ph.D.	09/2010	04/2014	Co-supervisor (With Izabella Lába)
Edward Kroc	Ph.D.	09/2010	04/2015	Supervisor
Dimitrios Karslidis	Ph.D.	03/2012	04/2016	Supervisor
Robert Fraser	Ph.D.	09/2013		Co-supervisor (With Akos Magyar)
Alessandro Marinelli	Ph.D.	06/2015		Co-supervisor (With Izabella Lába)

Current positions of graduate advisees:

1. *Ed Kroc*, who was an undergraduate alumnus of DePaul University of Chicago, received a Walter A. Pranger Memorial Award from the same institution “in recognition of high achievement in mathematics and the continuing pursuit of the learning of mathematics”. While at the University of British Columbia, he was awarded an Excellence in Teaching award by the Department of Mathematics. During and after graduation, he has worked as an independent consultant for the Canadian Union of Public Employees (CUPE) in Ottawa ON, Sustainability Solutions Group in Vancouver BC, and St. Paul’s Hospital in Vancouver BC. He is also the vice president of finance, contract, communications and outreach and chief negotiator of CUPE Local 2278, representing 3000+ UBC teaching assistants and markers. He is currently a postdoctoral research fellow in the Measurement, Evaluation and Research

Methodology group, located within the Department of Educational and Counselling Psychology, and Special Education (ECPS) at UBC. He is also a post-doctoral teaching fellow in the Department of Statistics and the Department of Zoology at UBC.

2. *Marc Carnovale* is currently a Ph.D. student in the Department of Mathematics at Ohio State University, Columbus, Ohio.
3. *Vincent Chan* won a graduate student teaching assistant award in recognition of his teaching contributions from the Department of Mathematics during his term as a Ph.D. student. After graduation, he was a temporary affiliated instructor at the Department of Mathematics and Statistics at the University of Calgary. He is now a full-time instructor for advanced college-level mathematics courses targeted for gifted students in Renert School in Calgary.

Postdoctoral advisees	Program type	Year		Supervisory Role
		Start	End	
Hadi Jorati	Postdoctoral Fellow	09/2006	04/2007	Co-supervisor (With Izabella Laba)
John Griesmer	Postdoctoral Fellow	09/2009	08/2011	Co-supervisor (With Izabella Laba)
Kevin Henriot	Postdoctoral Fellow	09/2014	08/2016	Co-supervisor (With Izabella Laba)

Current positions of postdoctoral advisees:

1. *Hadi Jorati* obtained a second Ph.D. from Yale University in near-eastern languages and civilizations, and is now an assistant professor in the Department of Near Eastern Languages and Culture at Ohio State University in Columbus, Ohio.
2. *John Griesmer* held positions as a lecturer in mathematics at Ohio State University, Columbus, Ohio and visiting faculty at the University of Denver, Colorado from 2011-2013. He is currently a software developer for metaTheorem LLC in Denver.
3. *Kevin Henriot* has accepted a position as a visiting assistant professor at the department of mathematics, McGill University, starting September 2016.

(d) *Continuing education activities:*

(e) *Visiting lecturer (indicate university/organization and dates):*

1. Tata Institute of Fundamental Research, Centre for Applicable Mathematics, Bangalore, India, July-August 2015.
2. Beijing Normal University, Beijing, China, March 2014 and August 2011.
3. Indian Institute of Science, Bangalore, India, July-August 2013, July-August 2015.
4. University of Kiel - Christian-Albrechts-Universität zu Kiel, Germany, July 2011.
5. University of Rochester, NY, June-December 2004.

(f) *Course development:*

1. Curriculum development for Math 105 in 2011 W T2 jointly with Rajiv Gupta, Keqin Liu and Wayne Nagata.
2. Development of an online probability module (<http://blogs.ubc.ca/math105>) for Math 105 in 2011 W T2 jointly with Greg Mayer and co-instructors Djun Kim, Ed Kroc and Erin Moulding.
3. Instructor for the Professional Development Program, University of California at Berkeley (1998–2001). The PDP is designed to help women and under-represented minority undergraduate students in mathematics and also those with learning disabilities and insufficient mathematical background.

(g) *Other:*

1. Multi-section course coordination as instructor-in-charge for Math 105, 2010 W T2 and 2011 W T2. An instructor-in-charge is responsible for the functioning of about 9-10 sections of a course (a total of roughly 1100 students) led by a team of instructors. Ensuring uniformity across sections is

of prime importance. With adequate input from the co-instructors, the instructor-in-charge sets a week-by-week course schedule, outlines learning goals, decides course policies, sets weekly homework assignments and course-common exams, supervises their grading and deals with all administrative issues pertaining to the students in the course.

2. Implementation of WebWork in

- Math 215/255 2015 S T1, and
- all sections of Math 105, 2010 and 2011 W T2.

WebWork is an online homework system that creates personalized homework assignments for students, and provides feedback in real time.

3. Implementation of clickers as part of an interactive learning initiative in large classes:

- Math 215/255 2015 S T1, and
- Math 105, 2010 and 2011 W T2.

Clicker is an interactive personal response system. Using handheld units, students can answer concept-based multiple-choice questions posed in class, allowing the instructor to assess progress and identify areas for improvement in real time. While being anonymous in class, responses are graded automatically and contribute towards term grades.

4. Use of Piazza as a class discussion platform in

- Math 215/255 (2015 W T1)
- Math 321 (2011 and 2014 W T2),
- Math 300 (2014 W T2) and
- Math 105 (2010 and 2011 W T2).

Piazza is an online class discussion forum, where students can pose questions (anonymously if they wish) regarding the course. Responses can be provided by instructors or teaching assistants, and also by registered students (moderated by instructor or teaching assistants). I use Piazza to supplement lecture material or as online office hours. It is often preferred by students as it is flexible around their schedule and provides faster responses than a scheduled office hour.

5. Course monitoring and feedback regarding teaching large lectures, with Gary Poole, Center for Teaching and Academic Growth, UBC (2009 WT1).

6. Summer undergraduate supervisor for a reading course in harmonic analysis for Artem Gulyaev (May-August 2008)

9. **SCHOLARLY AND PROFESSIONAL ACTIVITIES**

(a) *Areas of special interest and accomplishments:* Most structures encountered in real life are complex assemblies of simpler components. Effective analysis requires careful decomposition of such an object, so that properties of the whole can be translated to the pieces and vice versa. My field, harmonic analysis, makes this mathematically precise - fundamentally, this is like describing how the vibration of a string can produce different sounds by inclusion of different harmonics. Harmonic analysis is ubiquitous on our computers - it tells us how to efficiently compress information, storing a photograph with millions of pixels or the multi-layered sounds from an orchestra into small files. The same techniques help image the subsurface of the earth by listening to sound waves sent underground, or the interior of a patient's body from a few CT scans. My work, while exploring the theoretical aspects of harmonic analysis, is rooted in such concrete applications to other fields.

(b) *Research or equivalent grants (indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC)):*

Granting agency	Subject	COMP	\$ per year	Dates	Principal
Ruth E. Michler Memorial Prize, Association for Women in Mathematics (AWM)	Harmonic Analysis	C	USD\$50,000	09/2015 -12/2015	Yes
Discovery Grant, Natural Sciences and Engineering Research Council of Canada (NSERC)	Harmonic Analysis	C	CDN\$30,000	09/2012 -08/2017	Yes
Discovery Grant, Natural Sciences and Engineering Research Council of Canada (NSERC)	Harmonic Analysis	C	CDN\$13,000	09/2007 -08/2012	Yes

Division of Mathematical Sciences, National Science Foundation (NSF), USA	Harmonic Analysis	C	USD\$27,846	08/2006 –07/2009	Yes
Division of Mathematical Sciences, National Science Foundation (NSF) , USA	Harmonic Analysis	C	USD\$14,646	08/2003 –07/2006	Yes
Fairchild Senior Research Fellowship, Caltech, Pasadena, USA	Mathematics	C	USD\$5,000	01/2005 –08/2006	Yes

Grant and award clarification:

- I was the principal investigator and sole recipient for all the NSERC and NSF grants listed above.
- The Fairchild Senior Research Fellowship is a six-year position, which provides the recipient an opportunity of pursuing research at the department of Physics, Mathematics and Astronomy of California Institute of Technology with minimal teaching obligations. The fellowship grant quoted above, which accompanies and supplements the regular faculty salary, is intended mainly for travel and other research-related costs. I used the fellowship for two years only, opting to join UBC at the end of this period for personal reasons.
- The Ruth E. Michler Prize of the AWM is awarded annually to a woman in the position of Associate Professor. The primary criterion in selection is excellence in research and leadership. The prize provides a fellowship for the awardee to spend a semester in the Mathematics Department of Cornell University without teaching obligations. Details for the award are available at the following website: <https://sites.google.com/site/awmmath/programs/michler-prize>.

(c) *Other competitive grants:* The following grants were applied for and won competitively in order to organize academic events, such as conferences, workshops etc.

Event name and granting agency	\$	Dates	Role
“Menger curvature in complex analysis”, Research in Teams Banff International Research Station (BIRS)	in-kind support, estimated more than CDN\$3,000	07/2016	Co-PI
“International conference in harmonic analysis”, National Science Foundation, USA	US\$60,000	05/2016	Co-PI
“International conference in harmonic analysis”, Fields Institute, Toronto	CDN\$4,000	05/2016	PI
“International conference in harmonic analysis”, Pacific Institute for Mathematical Sciences (PIMS)	CDN\$6,000	05/2016	PI
“Two weeks in Vancouver; a summer school for undergraduate ...”, Fields Institute, Toronto	CDN\$7,500	08/2016	PI
“Two weeks in Vancouver; a summer school for undergraduate ...”, Pacific Institute for Mathematical Sciences (PIMS)	CDN\$20,000	08/2016	PI
Workshop on “Topics in several complex variables”, Banff International Research Station (BIRS) in Oaxaca, Mexico	in-kind support, estimated more than CDN\$30,000	10/2015	Co-PI
“Western international workshop in harmonic analysis, ...” Pacific Institute of Mathematical Sciences (PIMS)	CDN\$10,000	06/2015	Co-PI
“Connecting women in mathematics across Canada”, Banff International Research Station (BIRS)	in-kind support, estimated more than CDN\$10,000	10/2014	Co-PI
Workshop in “Analysis and boundary-value problems”, Banff International Research Station (BIRS)	in-kind support, estimated more than CDN\$30,000	07/2010	Co-PI

Grant and award clarification:

- The principal investigator (PI) acts as the primary liaison between the granting agency and the organizing committee and is in charge of all administrative work related to the grant proposal. A co-PI is a member of the organizing committee who helps in preparing the funding application and is involved in participant selection.
- The event “Two weeks in Vancouver: a summer school for undergraduate women in mathematics” is planned as a two-week long workshop targeted to sophomore and junior women specializing in

mathematics or related fields. The event is scheduled to be hosted by PIMS in August 2016. All travel, accomodation and field trip expenses for 16 selected participants will be covered by the grant.

- “Western international workshop in harmonic analysis, partial differential equations and geometric measure theory” was a three-day event hosted by PIMS that brought together experts working in many different areas of analysis. There were 27 participants, whose travel and accomodation (where applicable) were covered by the grant.
- Banff International Research Station hosts 48 5-day workshops every year, with an additional 20-25 workshops in its developing new station in Oaxaca, Mexico. Highly coveted as a conference site, competition for these spots is fierce. The two workshops “Analysis and boundary value problems” and “Topics in several complex variables” are part of BIRS’s regular weeklong programs, accomodating upto 42 participants. “Connecting women in mathematics across Canada” was a 2-day workshop with 25 participants. Use of BIRS’s conference facilities, as well as food and lodging for the participants are covered by these grants.
- Valuation for the BIRS workshops are based on conferences of similar size held at comparable locations.

(d) *Research or equivalent contracts (indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC)):*

(e) *Invited presentations (Conferences, workshops):*

1. “Conference on harmonic analysis and approximation theory”, Centre de Recerca Matemàtica, Barcelona, Spain, to be held June 2016.
2. “International Conference in Harmonic Analysis, in honour of F. Michael Christ”, University of Wisconsin, Madison, to be held May 2016.
3. Plenary lecture, Sixth Ohio River Analysis Meeting (ORAM), University of Kentucky at Lexington, March 2016. (1 hour)
4. “Ergodic, algebraic and combinatorial methods in dimension theory”, Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, February 2016. (1 hour)
5. Special session in “Pseudorandomness and its applications”, Joint Meetings of the American Mathematical Society and Mathematical Association of America, Seattle, January 2016. (20 minutes)
6. Plenary lecture, “2015 International conference in mathematics”, organized by Korean Women in Mathematical Sciences (KWMS) and Korea Institute of Advanced Study (KIAS), Korea Advanced Institute of Science and Technology, Daejeon, Korea, July 2015. (1 hour)
7. Minicourse in harmonic analysis, “Two weeks at Waterloo - a summer school for women in mathematics”, University of Waterloo, Ontario, August 2014. (20 hours)
8. “Satellite conference in harmonic analysis”, part of International Congress of Mathematics 2014, Chosun University, South Korea, August 2014. (1 hour)
9. “Harmonic analysis and partial differential equations”, Hausdorff Institute for Mathematics Trimester Program, Universität Bonn, Germany, July 2014. (1 hour)
10. “Workshop III: The Kakeya problem, restriction problem and sum-product theory”, Institute for Pure and Applied Mathematics, University of California, Los Angeles, May 2014. (1 hour)
11. “Multiparameter geometry and analysis”, Arkansas Spring Lecture Series, Fayetteville, Arkansas, April 2014. (1 hour)
12. “Conference in honour of Alexander Nagel”, University of Wisconsin, Madison, March 2013. (1 hour)
13. Special session on “Harmonic analysis, partial differential equations and geometric measure theory”, Joint Meeting of the American Mathematical Society and Mathematics Association of America, San Diego, California, January 2013. (20 minutes)
14. “Workshop for women in analysis and partial differential equations (PDE)”, Institute for Mathematics and its Applications, Minneapolis, Minnesota, June 2012. (1 hour)
15. “International conference in harmonic analysis and applications”, Nanjing, China, May 2012. (1 hour)

16. “Thematic lectures on resolution of singularities”, Harmonic Analysis Discussion Meeting, Kolkata, India, December 2011. (3 hours)
 17. “Workshop on harmonic analysis and partial differential equations”, Mexico City, Mexico, October 2011. (1 hour)
 18. “Conference in harmonic analysis and partial differential equations in honour of Eric Sawyer”, Fields Institute, Toronto, July 2011. (1 hour)
 19. Conference on “Oscillatory integrals in harmonic analysis”, International Centre for Mathematical Sciences, Edinburgh, UK, June 2011. (45 minutes)
 20. Special session on “Harmonic analysis and partial differential equations”, Joint Meeting of the American Mathematical Society and Mathematics Association of America, New Orleans, Louisiana, January 2011. (20 minutes)
 21. “Workshop in harmonic analysis and partial differential equations”, sponsored by the London Mathematical Society and Instituto de Ciencias Matemáticas, Madrid, Spain, September 2010.
 22. “Satellite conference in harmonic analysis”, Bhubaneswar, India, as part of International Congress of Mathematics 2010, August 2010. (1 hour)
 23. Workshop on “Analysis and boundary value problems on real and complex domains”, Banff International Research Station, July 2010. (1 hour)
 24. Special session on “Harmonic analysis, microlocal analysis, and partial differential equations”, American Mathematical Society-Sociedad Matemática Mexicana (AMS-SMM) Eighth International Meeting, Berkeley, June 2010. (20 minutes)
 25. “Harmonic analysis: a retrospective workshop”, Fields Institute, May 2010. (50 minutes)
 26. Special session on “Harmonic analysis”, Joint Meeting of the American Mathematical Society and Mathematics Association of America, San Francisco, January 2010. (20 minutes)
 27. Special session on “Harmonic analysis”, American Mathematical Society 2009 Fall Southeastern Meeting, Boca Raton, October 2009. (20 minutes)
 28. “New developments on the discrepancy function and related results”, Arkansas Spring Lecture Series, Fayetteville, Arkansas, April 2009. (1 hour)
 29. Special session on “Harmonic analysis”, Joint Meetings of the American Mathematical Society and Mathematics Association of America, Washington DC, January 2009. (20 minutes)
 30. Workshop on “Real analysis, harmonic analysis and applications”, Oberwolfach, Germany, July 2008. (1 hour)
 31. Plenary talk, “National Science Foundation Focused Research Grant (NSF FRG) Conference on New Developments in Harmonic Analysis”, University of Georgia, Athens, October 2007. (1 hour)
 32. Special session titled “Harmonic analysis : trends and perspectives”, American Mathematical Society sectional meeting, Salt Lake City, Utah, October 2006. (20 minutes)
 33. Workshop titled “Real analysis, harmonic analysis and applications of partial differential equations”, Oberwolfach, July 2005. (1 hour)
 34. Special session on “Spectral and inverse spectral theories of Schrödinger operators”, American Mathematical Society-India Joint Mathematics Meeting, Bangalore, December 2003. (30 minutes)
 35. Special session on “Harmonic analysis”, Canadian Mathematical Society National Winter Meeting, Vancouver, BC, December 2003. (25 minutes)
 36. Special session on “Harmonic analysis”, American Mathematical Society-Real Sociedad Matemática Española Joint Mathematics Meeting, Seville, 2003. (20 minutes)
 37. “Combinatorial and number-theoretic methods in harmonic analysis”, Erwin Schrödinger Institute, Vienna, April 2003. (1 hour)
- (f) *Invited presentations* (seminars, colloquia, lectures):
1. Colloquium, University of Oregon, Eugene, April 2016.
 2. Analysis seminar, McGill University, Montreal, April 2016.
 3. Colloquium, Université du Québec à Montréal, April 2016.
 4. University of British Columbia Math Circle, March 2016.
 5. Colloquium, University of Albany, December 2015.

6. Analysis seminar, University of Delaware, December 2015.
7. Analysis seminar, University of Rochester, November 2015.
8. Colloquium, Cornell University, October 2015.
9. Colloquium, Syracuse University, October 2015.
10. “Thematic lectures on topics in harmonic analysis and applications”, Tata Institute of Fundamental Research, Bangalore, India, July-August 2015. (8 hours)
11. Colloquium, Indian Statistical Institute, Bangalore, August 2015. (1 hour)
12. Lecture series on “Finite configurations in sparse sets”, Indian Institute of Science, Bangalore, India, July 2015. (4 hours)
13. Public lecture, “2015 International Conference in Mathematics”, organized by Korean Women in Mathematical Sciences (KWMS) and Korea Institute of Advanced Study (KIAS), Korea Advanced Institute of Science and Technology, Daejeon, Korea, July 2015. (30 minutes)
14. University of British Columbia Math Circle, Vancouver, BC, February 2015. The UBC Math Circle was started in 2006 to create a network of students interested in mathematics and to enhance the performance of the top Metro Vancouver high school students in the various math competition opportunities leading to selection on the Canadian International Mathematical Olympiad. A second and more important objective of the Math Circle is to make interested high school students aware of the wonderful world of mathematics and related sciences beyond contests. (1 hour)
15. Rainwater seminar, University of Washington, Seattle, February 2015. (1 hour)
16. Lecture series on “Kakeya-type sets and directional maximal operators”, Beijing Normal University, China, March 2014. (3 hours)
17. Colloquium lecture, Tata Institute of Fundamental Research, Centre for Applicable Mathematics, Bangalore, India, August 2013. (1 hour)
18. Colloquium lecture, Indian Institute of Science, Bangalore, India, August 2013. (1 hour)
19. Lecture series on “Harmonic analysis and geometric measure theory”, Indian Institute of Science, Bangalore, India, August 2013. (10 hours)
20. Colloquium, University of Waterloo, December 2012. (1 hour)
21. Undergraduate Mathematics Colloquium, University of British Columbia, November 2012. (1 hour)
22. Graduation Reception, University of British Columbia, May 2012. (1 hour)
23. Colloquium organized by Women in Mathematics at Wisconsin (WIMAW), University of Wisconsin, Madison, February 2012. (1 hour)
24. Analysis seminar, University of Wisconsin, Madison, February 2012. (1 hour)
25. Analysis seminar, Short-term invited foreign specialist project, Beijing Normal University, Beijing, China, August 2011. (3 hours)
26. Analysis seminar, University of Kiel, Germany, July 2011. (1.5 hours)
27. Analysis seminar, University of Wisconsin, Madison, May 2011. (1 hour)
28. Algebraic geometry seminar, University of British Columbia, Vancouver, BC, February 2011. (1 hour)
29. Colloquium lecture, University of Alberta, Edmonton, February 2011. (1 hour)
30. Analysis and operator theory seminar, University of Alberta, Edmonton, February 2011. (1 hour)
31. Colloquium lecture, University of British Columbia, Vancouver, BC, October 2010. (1 hour)
32. Inverse Problems Seminar, University of Washington, Seattle, February 2009. (1 hour)
33. Colloquium lecture, Indian Institute of Science, Bangalore, India, August 2008. (1 hour)
34. “Taste of Pi”, Simon Fraser University, Popular mathematics talk aimed at high school students, May 2008. (1 hour)
35. Analysis seminar, University of Wisconsin - Madison, April 2008. (1 hour)
36. Analysis seminar, University of California Los Angeles, December 2007. (1 hour)
37. Colloquium lecture, University of Montana at Missoula, April 2007. (1 hour)
38. Analysis seminar, University of Montana at Missoula, April 2007. (1 hour)
39. Concordia-McGill Joint Analysis seminar, McGill University, March 2007. (1 hour)
40. Analysis seminar, University of Wisconsin at Madison, February 2007. (1 hour)

41. Differential geometry-PDE seminar, University of Washington, Seattle, August 2006. (1 hour)
42. Colloquium lecture, University of California at Santa Barbara, February 2006. (1 hour)
43. Colloquium lecture, University of Iowa at Iowa City, February 2006. (1 hour)
44. Colloquium lecture, Pomona College, February 2006. (1 hour)
45. Colloquium lecture, Harvey Mudd College, February 2006. (1 hour)
46. Colloquium lecture, Georgia Institute of Technology, Atlanta, January 2006. (1 hour)
47. Colloquium lecture, DePaul University, Chicago, January 2006. (1 hour)
48. Colloquium lecture, Washington University at St. Louis, January 2006. (1 hour)
49. Colloquium lecture, University of Illinois at Chicago, January 2006. (1 hour)
50. Colloquium lecture, University of British Columbia, Vancouver, BC, January 2006. (1 hour)
51. Differential geometry-Mathematical Physics-Partial Differential Equations seminar, University of British Columbia, Vancouver, BC, January 2006. (1 hour)
52. Colloquium lecture, Georgetown University, Washington DC, November 2005. (1 hour)
53. Seminar, Indian Statistical Institute, Delhi, July 2005. (1 hour)
54. Joint seminar of Indian Institute of Science and Tata Institute of Fundamental Research, Bangalore, July 2005. (1 hour)
55. Joint seminar of Institute of Mathematical Sciences and Chennai Mathematics Institute, Chennai, July 2005. (1 hour)
56. Colloquium lecture, Rice University, Houston, March 2004. (1 hour)
57. Colloquium lecture, University of Illinois at Urbana-Champaign, February 2004. (1 hour)
58. Colloquium lecture, University of Nebraska at Lincoln, February 2004. (1 hour)
59. Colloquium lecture, Wayne State University, Detroit, February 2004. (1 hour)
60. Colloquium lecture, Louisiana State University, Baton Rouge, January 2004. (1 hour)
61. Colloquium lecture, University of Rochester, January 2004. (1 hour)
62. Differential Geometry PDE Seminar, University of Washington, Seattle, June 2003. (1 hour)
63. Analysis seminar, University of Missouri at Columbia, December 2001. (1 hour)

(g) *Contributed presentations* (conferences, workshops):

1. Contributed talk, Workshop on “Resolution of singularities”, Centre de recherches mathématiques (CRM), Montreal, August 2003. (1 hour)
2. Contributed talk, Conference in “Inverse problems and nonlinear analysis”, Pan-American Advanced Studies Institute on Partial Differential Equations, Santiago, Chile, December 2002. (20 minutes)
3. Contributed talk, 27th Spring Lecture Series in the Mathematical Sciences, University of Arkansas, Fayetteville, April 2002. (20 minutes)
4. Contributed talk, American Mathematical Society, Institute of Mathematical Sciences and Society for Industrial and Applied Mathematics (AMS-IMS-SIAM) Joint Summer Research Conference on Harmonic Analysis, Mount Holyoke College, Massachusetts, June 2001. (30 minutes)
5. Two contributed presentations, Summer School on “Spectral theory of Schrödinger operators”, Lake Arrowhead, University of California, Los Angeles, July 2000. (1 hour each)

(h) *Conference organization and participation:*

1. Co-organizer of “Satellite conference in several complex variables and PDE-s”, International Congress of Mathematics, Brazil (to be held in 2018).
2. Co-organizer of “Two weeks in Vancouver - a summer school for undergraduate women in mathematics”, Pacific Institute for Mathematical Sciences, University of British Columbia, Vancouver (to be held in August 2016).
3. Co-organizer of a “Research in teams” workshop on “Menger curvature and its applications in complex analysis”, Banff International Research Station (to be held July 2016).
4. Co-organizer of “Conference in harmonic analysis in honour of F. Michael Christ”, University of Wisconsin, Madison (to be held in May 2016).
5. Co-organizer of a weeklong workshop titled “Topics in several complex variables”, Banff International Research Station at Oaxaca, Mexico (to be held in October 2015).

6. Co-organizer of “Western international workshop in harmonic analysis and partial differential equations”, a three-day workshop at the Pacific Institute for Mathematical Sciences, University of British Columbia, Vancouver, BC, June 2015.
7. Participation in “Changing the Culture”, a conference in mathematics education, Vancouver, BC, May 2015.
8. Co-organizer of a two-day workshop titled “Connecting women in mathematics across Canada”, Banff International Research Station, October 2014.
9. Participant of “Workshop in real analysis, harmonic analysis and applications”, Oberwolfach, Germany, July 2014.
10. Organizer of “Special session in harmonic analysis and its applications”, Association for Women in Mathematics Research Symposium, Santa Clara, California, March 2013.
11. Co-organizer of “Summer school in harmonic analysis and geometric measure theory”, Catalina Island, California, June 2012.
12. Co-organizer for a two-day special session titled “Harmonic analysis and additive combinatorics”, National Winter Meeting of the Canadian Mathematical Society, Vancouver, BC, December 2010.
13. Co-organizer for a weeklong workshop titled “Analysis and boundary value problems on real and complex domains”, Banff International Research Station, July 2010.
14. Co-organizer for a special session titled “Analysis”, part of Joint Meeting of the Canadian Mathematical Society and the Sociedad Matemática Mexicana, Vancouver, BC, August 2009.
15. Participation in “Summer school on seismic imaging”, Seattle, Washington, August 2009.
16. Co-organizer for a special session “Topics in Harmonic Analysis”, AMS Western Sectional Meeting, UBC, Vancouver, BC, October 2008.
17. Participant of workshop “Ergodic theory and additive combinatorics”, Mathematical Sciences Research Institute, Berkeley, August and November 2008.
18. Co-organizer of a week-long conference in harmonic analysis, part of Fields Institute thematic program on “New trends in harmonic analysis”, Toronto, February 2008.
19. Co-organizer for a two-day special session in “Harmonic analysis”, Canadian Mathematical Society National Winter Meeting”, Toronto, December 2006.

Role as organizer and co-organizer: Organization of workshop, summer school, and conferences involves securing funding from multiple sources (details have been provided in “grants and awards” section), selecting invited participants and speakers and allocating resources for both senior and junior researchers. Dissemination of lecture material and follow-up assessment of the event’s effectiveness are required in some instances. Special session organization usually occurs by invitation from the organizing agency such as the Canadian Mathematical Society (CMS) or Association for Women in Mathematics (AWM).

(i) *Other:* (e.g. visitors)

1. Akos Magyar, University of Georgia, Athens (April 2016).
2. K S Senthil Raani, Indian Institute of Science, Bangalore, India (June 2015).
3. Kathryn Hare, University of Waterloo, Ontario (March 2015).
4. Joonil Kim, Yonsei University, South Korea and UC-Irvine (June 2015, October 2014).
5. Loredana Lanzani, NSF and University of Arkansas, Fayetteville (May 2013).
6. Andrew Raich, University of Arkansas, Fayetteville (November 2012).
7. Tristan Collins, Columbia University, New York (January 2011).
8. Jennifer Halfpap, University of Montana, Missoula (June 2010, June 2009, June 2008).
9. Boris Solomyak, University of Washington, Seattle (March 2010).
10. Allan Greenleaf, University of Rochester, New York (November 2009, February 2016).
11. Alexander Nagel, University of Wisconsin, Madison (February 2009).
12. Gunther Uhlmann, University of Washington, Seattle (2008).
13. Andreas Seeger, University of Wisconsin, Madison (October 2008).

10. **SERVICE TO THE UNIVERSITY**

- (a) *Memberships on committees, including offices held and dates*

1. Member of departmental committee of instructor appointments, Department of Mathematics, UBC (2014 W T1 and T2).
2. NSERC USRA coordinator, Department of Mathematics, UBC (2008-2013).
3. Organizer, Harmonic Analysis Seminar, Department of Mathematics, UBC (2012 W T1 and T2, 2014 W T1 and T2).
4. Member of departmental committee on appointments in instructor search, Department of Mathematics, UBC (2012 W T2).
5. Member of graduate admissions committee, Department of Mathematics, UBC (2012 W T1 and T2, 2014 W T1 and T2, 2015 W T1 and T2).
6. Member of research users group, Department of Mathematics building plan (2012 W T1 and T2).
7. Member of the head search committee, Department of Mathematics, UBC (2012 W T1).
8. Member of the peer teaching evaluation committee, Department of Mathematics, UBC (2011W T1 - present).
9. Member of departmental committee on appointments, Department of Mathematics, UBC (2011 W T1 and T2).
10. Member of the Killam teaching awards committee, Faculty of Science, UBC (2011 W T1 and T2).
11. Online judge for "Rising Stars of Research", a research poster competition which brings top undergraduate researchers from across Canada to British Columbia to showcase their research accomplishments and explore their passion for innovation. (June 2010).
12. Panelist on grantsmanship, PIMS Postdoctoral Fellow (PDF) Day (April 2009).
13. Member of the qualifying exam committee, Department of Mathematics, UBC (2008W T1 and T2).
14. Member of the maternal/paternal leave committee, Department of Mathematics, UBC (2008 W T1).
15. Participant of professional development workshop for postdoctoral fellows (PDF day), organized by UBC and PIMS (October 2008).
16. Member of departmental committee of appointments, Department of Mathematics, UBC (2007W T2).
17. Member of head search committee, Department of Mathematics, UBC (2006 W T2).
18. Member of graduate and postdoctoral program academic plan subcommittee, Department of Mathematics, UBC (2006 W T1).

(b) *Other service, including dates*

1. Member of Ph.D. examination committee for Kyle Hambrook (June 2015).
2. University external examiner, Ph.D. examination committee for Felipe Garcia Ramos Aguilar (March 2015).
3. Reader of master's thesis for Robert Fraser (May 2013).
4. Member of supervisory committee for Tatchai Titichetrakun (August 2012).
5. Member of supervisory committee for Kyle Hambrook (August 2012).
6. Member of dissertation committee for Brian Cook (May 2012).
7. Member of dissertation committee for Eva Koo (May 2012).
8. Chair of oral exam committee for Ryan Schwarz (October 2011).
9. Chair of oral exam committee for Cindy Blois (April 2011).
10. Member of thesis defense committee for Karsten Chipeniuk (April 2010).
11. Member of oral exam committee for Brian Cook (May 2010).
12. Chair of oral exam committee for Dennis Timmers (January 2010).
13. Chair of oral exam committee for Vishaal Kapoor (September 2008).
14. Member of oral exam committee for Kelan Zhai (June 2008).
15. Member of the doctoral thesis defense committee for Mariah Hamel (June 2008).

11. SERVICE TO THE COMMUNITY

- (a) *Memberships on scholarly societies, including offices held and dates*
- (b) *Memberships on other societies, including offices held and dates*

(c) *Memberships on scholarly committees, including offices held and dates*

1. Panelist, Session on “Motivating women of colour in STEM : a panel on obstacles and opportunities”, general body event of the Women of Colour Coalition, Cornell University, November 2015.
2. Panelist, Session on gender equity, PIMS young researchers conference, June 2014.
3. Member of Canadian Mathematical Society’s (CMS) Committee on Women in Mathematics, 2012-2014. The Committee’s mandate is to monitor the status of women within the Canadian mathematical community and the CMS, recommend actions to the Board which will assure equitable treatment of women, and encourage the participation of women at all levels of mathematics. The committee also maintains liason with national and international organizations concerned with the participation of women in mathematics and other areas of science. The Committee organizes regular networking and mentorship events at the National CMS Meetings and has initiated a biannual workshop titled “Connecting Women in Mathematics Across Canada” (CWIMAC) whose most recent workshop was held in Banff in 2014 (further details in the “grants” section).
4. Member of Canadian Mathematical Society’s (CMS) Doctoral Prize Committee, 2012 and 2013. This Committee is in charge of selecting the recipient of the prestigious CMS Doctoral Prize, which recognizes outstanding performance by a doctoral student who graduated from a Canadian university in the preceding year (January 1st to December 31st).
5. National Science Foundation’s review panelist in Harmonic Analysis and Linear PDE panel - January 2011, February 2010, January 2009, January 2008. National Science Foundation is the primary grant-giving organization for the basic sciences in the United States, analogous to Natural Sciences and Engineering Research Council (NSERC) in Canada.

(d) *Memberships on other committees, including offices held and dates*

1. Member of the steering committee for Women in Mathematics, a committee based at the University of Waterloo involved in organizing a two week-long workshop in 2012 for female undergraduate students.
2. Member of the Mathematics Opportunity Committee, University of California at Berkeley (1999-2001). The committee is dedicated to helping women and under-represented minority students successfully complete graduate mathematics study at UC Berkeley.

(e) *Editorships (list journal and dates)*

1. Member of the editorial board, Transactions and Memoirs of the American Mathematical Society (AMS), 2011-2019. Transactions of the AMS (which publishes mid-size manuscripts about 30-40 pages in length) and Memoirs of the AMS (which publishes long monographs) are two very selective journals devoted to research articles in all areas of pure and applied mathematics. With an acceptance rate of roughly 15-20%, these journals are highly ranked in terms of both citations and impact factor among the general interest journals in our discipline. As the editor for harmonic analysis and complex analysis, I handle about 60-70 papers per year for Transactions and about 3-7 for Memoirs.
2. Proceedings of the Edinburgh Mathematical Society, 2012-present. The Edinburgh Mathematical Society, founded in 1883, has evolved into the principal society for the promotion of mathematics research in Scotland. The Society has published its Proceedings since 1884. This journal contains research papers on topics in a broad range of pure and applied mathematics, together with a number of topical book reviews. As the editor for analysis, I handle about 6-10 papers for this journal per year.

(f) *Reviewer (journal, agency, etc. including dates)*

I typically review 1-4 papers for journals and/or conference proceedings per year. Some publishers that I have reviewed for in the past are:

1. Journal of Functional Analysis (2015)
2. Analysis and PDE (2014)
3. Canadian Journal of Mathematics (2011)

4. Transactions of the American Mathematical Society (2011, 2012)
5. Journal of Potential Analysis (2011, 2012)
6. Mathematische Zeitschrift (2010)
7. Publicationes Mathematicae Debrecen (2010)
8. American Journal of Mathematics (2010, 2012, 2014)
9. Endré Szemerédi Birthday Volume (2010)
10. Mathematical Research Letters (2010, 2015)
11. Mathematische Annalen (2008)
12. Michigan Math Journal (2008)
13. Indiana University Mathematics Journal (2008)
14. Proceedings of the American Mathematical Society (2008, 2009, 2016)
15. Mathematische Nachrichten (2007)
16. Glasgow Mathematical Journal (2007)
17. Pacific Journal of Mathematics (2003)

(g) *External examiner (indicate universities and dates)*

(h) *Consultant (indicate organization and dates)*

1. South African National Research Foundation NRF (2012S).
2. Reviewer for BIRS workshop proposal (2008W T1, 2011 W T1, 2012 W T1).
3. Agence Nationale de la Recherche, France (2010W T2).

(i) *Other service to the community*

1. Volunteer for Problem Solving Workshop at Point Grey Mini School. (January 2010)

12. AWARDS AND DISTINCTIONS

(a) *Awards for Teaching (indicate name of award, awarding organizations, date)*

1. UBC Killam Teaching Award (2011). Awarded by the Faculty of Science, University of British Columbia.
2. Nikki Kose Memorial Teaching Prize (1999). Awarded by the University of California at Berkeley.
3. Outstanding graduate student instructor award (1998). Awarded by the University of California at Berkeley, Department of Mathematics.

(b) *Awards for Scholarship (indicate name of award, awarding organizations, date)*

1. Krieger-Nelson prize for research excellence (2016). Awarded by the Canadian Mathematical Society.
2. Ruth E. Michler Memorial prize (2015). Awarded by the Association for Women in Mathematics and Cornell University.
3. Adjunct faculty (2014-2017), Centre for Applicable Mathematics, Tata Institute of Fundamental Research, Bangalore, India.
4. Visiting faculty (2013), Indian Institute of Science, Bangalore, India.
5. US Junior Oberwolfach Fellow (2005). Awarded by National Science Foundation, USA.
6. Fairchild Research Grant (2005, 2006). Awarded by California Institute of Technology.
7. P.C. Mahalanobis Gold Medal (1995). Awarded by the Indian Statistical Institute.

(c) *Awards for Service (indicate name of award, awarding organizations, date)*

(d) *Other Awards*

13. OTHER RELEVANT INFORMATION (Maximum one Page)

THE UNIVERSITY OF BRITISH COLUMBIA

Publications Record

Date: March 31, 2016

Initials: MP

Surname: Pramanik

First Name: Malabika

Middle Name(s):

Policy on authorship:

- Names of authors are listed alphabetically by the last name as is the convention in mathematics.
- All authors are assumed to have contributed equally to the paper, in accordance with the norm of the discipline.
- Author names that are underlined indicate graduate or undergraduate students or postdoctoral researchers under my supervision at the time of preparation of the manuscript.
- Five significant contributions to be included in the dossier have been indicated with asterisks.

1. **REFEREED PUBLICATIONS**

(a) Journals

1. Malabika Pramanik, **Weighted inequalities for real-analytic functions in \mathbb{R}^2** . *J. Geom. Anal.*, **12**, No. 2:265-288, 2002.
2. Malabika Pramanik, **Convergence of two-dimensional weighted integrals**. *Transactions of the American Mathematical Society*, **354**, No. 4:1651-1665, 2002.
3. Malabika Pramanik and Erin Terwilleger, **A weak L^2 estimate for a maximal dyadic sum operator on \mathbb{R}^n** . *Illinois Journal of Mathematics*, **47**, No. 3:775-813, 2003.
4. Malabika Pramanik and Chan Woo Yang, **Decay estimates for weighted scalar oscillatory integrals on \mathbb{R}^2** . *Indiana University Mathematics Journal*, **53**, No. 2:613-645, 2004.
5. Malabika Pramanik and Chan Woo Yang, **L^p decay estimates for weighted oscillatory integral operators on \mathbb{R}** . *Revista Matemática Iberoamericana*, **21**, No. 3:1071-1095, 2005.
6. Malabika Pramanik and Andreas Seeger, **Averages over curves in \mathbb{R}^3 and associated maximal operators**. *American Journal of Mathematics*, **129**, No. 1:61-103, 2007.
7. Allan Greenleaf, Malabika Pramanik and Wan Tang, **Oscillatory integral operators with homogeneous polynomial phases in several variables**. *Journal of Functional Analysis*, **244**:444-487, 2007.
8. Malabika Pramanik and Chan Woo Yang, **Double Hilbert transform along real-analytic surfaces in \mathbb{R}^{d+2}** . *Journal of the London Mathematical Society*, **77** No. 2:363-386, 2008.
9. Izabella Laba and Malabika Pramanik, **Arithmetic progressions in sets of fractional Hausdorff dimension**. *Geometric and Functional Analysis*, **19** No. 2:429-456, 2009.
10. Alexander Nagel and Malabika Pramanik, **Maximal averages over linear and monomial polyhedra**. *Duke Mathematical Journal*, **149** No. 2:209-277, 2009.
11. Ciprian Demeter, Malabika Pramanik, and Christoph Thiele, **Multilinear singular operators with fractional rank**. *Pacific Journal of Mathematics*, **246** No. 2:293-324, 2010.
12. Malabika Pramanik, Keith Rogers and Andreas Seeger, **A Calderón-Zygmund estimate with applications to generalized Radon transforms**. *Studia Mathematica*, **202**: 1-15, 2011.
13. Izabella Laba and Malabika Pramanik, **Maximal operators and differentiation theorems for sparse sets**. *Duke Mathematical Journal*, **158** No. 3: 347-411, 2011.

14. Raluca Felea, Allan Greenleaf and Malabika Pramanik, **Fourier integral operator calculus for marine seismic imaging II: Sobolev estimates.** *Mathematische Annalen*, **352(2)**: 293-337, 2012.
15. Tristan Collins, Allan Greenleaf and Malabika Pramanik, **A multidimensional resolution of singularities with applications to analysis** *American Journal of Mathematics*, **135 No. 5**: 1179-1252, 2013.
16. Malabika Pramanik and Rudra Prasad Sarkar, **Chaotic dynamics of the heat semigroup on Riemannian symmetric spaces** *Journal of Functional Analysis*, **266 No. 5**: 2867-2909, 2014.
17. Vincent Chan, Izabella Łaba and Malabika Pramanik, **Point configurations in sparse sets** (45 pages). To appear in *Journal d'Analyse Mathématique*, 2016.
18. Edward Kroc and Malabika Pramanik, **Keakeya-type sets over Cantor sets of directions in \mathbb{R}^{d+1}** (54 pages). To appear in *Journal of Fourier Analysis and Applications*, 2016.
19. Allan Greenleaf, Alex Iosevich and Malabika Pramanik, **Necklaces inside thin sets of \mathbb{R}^d** (20 pages). To appear in *Mathematics Research Letters*.

Clarification regarding journals: Among the journals I have published in,

- *Duke Mathematical Journal*,
- *American Journal of Mathematics*, and
- *Mathematische Annalen*

are first-tier general interest journals that cater to mathematical audiences of all areas. The first two routinely appear among the top 20 (out of more than 2000) in mathematical journal rankings, with some of the highest impact factors and lowest acceptance rates within this discipline.

On the other hand, the following journals

- *Geometric and Functional Analysis*,
- *Journal d'Analyse Mathématique*,
- *Journal of Functional Analysis*, and
- *Journal of Fourier Analysis and Applications*

are among the most prestigious and highest ranked (within the top 5 out of more than 150) subject-specific journals that specialize in mathematical analysis.

(b) Conference Proceedings

1. Malabika Pramanik and Andreas Seeger, **L^p -Sobolev regularity of a restricted X-ray transform.** *Proceedings of the Conference on Harmonic Analysis and its applications, Osaka, November 2004*, 47-64, 2006.
2. Izabella Łaba and Malabika Pramanik, **Wolff's inequality for hypersurfaces.** *Collectanea Mathematica, Proceedings of the 7th International Conference on Harmonic Analysis and Partial Differential Equations, El Escorial, Madrid, Spain 2004*, 293-326, 2006.
3. Alexander Nagel and Malabika Pramanik, **Diagonal estimates for the Bergman kernel in monomial-type domains** (15 pages). *Analysis and applications : Proceedings of a Conference in honor of Eli Stein, Princeton 2011*.

(c) Other

2. NON-REFEREED PUBLICATIONS

- (a) Journals
- (b) Conference Proceedings

1. Izabella Laba and Malabika Pramanik, **Maximal operators and differentiation theorems for sparse sets**. CRM Preprints for Harmonic Analysis, Geometric Measure Theory and Quasiconformal Mappings, Centre de Recerca Matemàtica, Barcelona, Spain, 2010.

(c) Other

3. BOOKS

- (a) Authored
- (b) Edited
- (c) Chapters

4. PATENTS

5. SPECIAL COPYRIGHTS

6. ARTISTIC WORKS, PERFORMANCES, DESIGNS

7. OTHER WORKS

- (a) Papers by my students that contain my indirect contribution:

The following articles resulted during my supervision or co-supervision of the students mentioned below. In mathematics, it is common for supervisors to refrain from co-authorship even when they have a guiding and significant role in shaping the student's research.

1. Marc Carnovale, **Gowers norms for singular measures**, part of Master's essay (18 pages, to be submitted for publication). Available at <http://arxiv.org/abs/1308.2721>.
2. Marc Carnovale, **Higher order Fourier dimension and frequency decompositions**, part of Master's essay (21 pages, to be submitted for publication). Available at <http://arxiv.org/abs/1308.2918>.
3. Marc Carnovale, **Long progressions in sets of fractional dimension**, part of Master's essay (17 pages, to be submitted for publication). Available at <http://arxiv.org/abs/1308.2919>.
4. Dimitrios Karlidis, **Bounds for hyperbolic sums with restricted coefficients in Orlicz spaces**, part of Ph.D. thesis (20 pages, submitted for publication).
5. Robert Fraser, **Kekeya-type sets on local fields**, *Mathematika*, volume **62**, issue **2**, 614-629, 2016.
6. Dimitrios Karlidis, **A sharp signed small ball inequality with restricted coefficients**, part of Ph.D. thesis, accepted for publication in *Indiana University Mathematics Journal*, 2015.

8. WORK SUBMITTED (including publisher and date of submission)

1. Kevin Henriot, Izabella Laba, Malabika Pramanik, **On polynomial configurations in fractal sets**, submitted.

9. WORK IN PROGRESS (including degree of completion)

1. Brian Cook, Akos Magyar and Malabika Pramanik, **A Roth-type theorem for dense subsets of \mathbb{R}^d** , preprint.
2. Robert Fraser and Malabika Pramanik, **Avoidance of patterns**, preprint.
3. Laura Cladek, Kevin Henriot, Ben Krause, Izabella Laba and Malabika Pramanik, **A discrete Carleson theorem along the primes with a restricted supremum**, preprint.