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Research Interests	Partial Differential Equations, Harmonic Analysis, Optimization	
Education and Employment	Nagoya University, Nagoya, JAPAN Designated Assistant Professor (YLC) September 2014-	
	<ul> <li>Université de Cergy-Pontoise, Cergy-Pontoise, FRANCE</li> <li>Postdoc September 2013-September 2014</li> <li>Host Researcher: Frank Merle</li> </ul>	
	<ul> <li>Japan Society For The Promotion Of Science, Kyoto, JAPAN</li> <li>Fellow August 2011-August 2013</li> <li>Host Researcher: Kenji Nakanishi</li> </ul>	
	Courant Institute Of Mathematical Sciences, New York, USA Courant Instructor 2010-2011	
	Institute For Advanced Study, Princeton, USA Member 2009-2010	
	<b>University Of California, Los Angeles</b> , Los Angeles, USA Postdoctoral Scholar 2008-2009	
	<ul> <li>University Of California, Los A</li> <li>Ph.D. Candidate, Mathematics,</li> <li>Dissertation Topic: "Global H 3"</li> <li>Advisor: Terence Tao</li> </ul>	Angeles, Los Angeles, USA 2004-2008 Existence For The Defocusing Cubic Wave Equation In Dimension
	M.S., Mathematics, 2004-2005	
	Ecole Normale Superieure De Cachan, Cachan, FRANCE Master Math/Vision, 2001-2003	
	<b>Ecole Centrale De Lille</b> , Lille, FRANCE Grande Ecole d'Ingenieurs, 1998-2001	
VISITING Positions	<ul><li>IHES, Bures-sur-Yvette, FRANCI</li><li>Visitor, June 2012</li><li>Host Researcher: Frank Merle</li></ul>	Ε

Academic Experience	YLC, Lecture For Graduate Students (Title: Partial Differential Equations) { Fall 2016 }		
	YLC, Lectures For Graduates Students (Title: Wave Equations) { Fall 2014 }		
	Courant Instructor, Tutoring Center { June 2011 }		
	Courant Instructor, Linear Algebra { Spring 2011 }		
	Courant Instructor, Calculus II (Section 9) { Fall 2010 }		
	Teaching Associate, Math 3A (Calculus for Life Science Students) { Fall 2007 }		
	Research Assistant { Spring 2007 }		
	Teaching Associate, Math 131 B (Real Analysis) { Winter 2007 }		
	Teaching Assistant, Math 151 A (Applied Numerical Methods) { Fall 2006 }		
	Teaching Assistant, Math 151 B (Applied Numerical Methods) { Spring 2006 }		
	Teaching Assistant, Math 132 B (Complex Analysis) { Winter 2006 }		
	Teaching Assistant, Math 164 (Optimization) { Fall 2005 }		
	Research Assistant { 2004-2005 }		
GRANTS AND DISTINCTIONS	Institute For Advanced Study, Princeton, USA: Member, 2009-2010.		
	JSPS grant (KAKENHI): April 2015-		
Publications	[ Available on http://www.math.nagoya-u.ac.jp/~tristanroy ]		
	T. Roy and K. Tsugawa, Construction Of Solutions For A Class Of Dispersive Equations, in progress.		
	T. Roy, On Jensen-type Inequalities For Unbounded Radial Scattering Solutions Of A Loglog Energy- Supercritical Schrödinger Equation, preprint, arXiv:1709.01333.		
	T. Roy, Scattering Above Energy Norm Of Solutions Of A Focusing Size-Dependent Log Energy- Supercritical Schrodinger Equation With Radial Data Below Ground State, preprint, arXiv:1701.02689.		
	K. Nakanishi and T. Roy, <i>Global Dynamics Above The Ground State For The Critical Klein-Gordon Equation</i> , preprint.		
	T. Duyckaerts and T. Roy, Blow-up Of The Critical Sobolev Norm For Nonscattering Radial So- lutions Of Supercritical Wave Equations In Space Dimension 3, to appear, Bulletin De La Société Mathématique De France, arXiv:1506.00788.		
	T. Roy, A Weak Form Of The Soliton Resolution Conjecture For High-Dimensional Fourth-Order Schrödinger Equations, Journal of Hyperbolic Differential Equations, Vol. 14, No. 2 (2017) 249-300.		
	K. Nakanishi and T. Roy, <i>Global Dynamics Above The Ground State For The Energy-critical Schrödinger Equation With Radial Data</i> , Communications On Pure And Applied Analysis, Volume 15, Issue 6, November 2016, 2023-2058.		

T. Roy, On The Interpolation With The Potential Bound For Global Solutions Of The Defocusing Cubic Wave Equation on T2, Journal Of Functional Analysis, 270 (2016), no. 9, 3280-3306.

S. Kwon and T. Roy, Scattering Of Rough Solutions Of The Nonlinear Klein-Gordon Equations In 3D, Adv. Differential Equations 21 (2016), no. 3-4, 333-372.

T. Roy, On Control Of Sobolev Norms For Some Semilinear Wave Equations With Localized Data, Journal Of Functional Analysis, Volume 265, Issue 11, December 2013, Pages 2724-2752.

S. Kwon and T. Roy, *Bilinear Local Smoothing Estimates For Airy Equation*, Differential And Integral Equations, 25 (2012), No.1-2, 75-83.

T. Roy, Scattering Above Energy Norm Of Solutions Of A Loglog Energy-supercritical Schrödinger Equation With Radial Data, Journal Of Differential Equations, 250 (2011), No.1, 292-319.

M. Keel, T. Roy and T. Tao, *Global Well-posedness Of The Maxwell-Klein-Gordon Equation Below The Energy Norm*, Disc. Cont. Dynam. Systems A, 30 (2011), no. 3, 573-621.

T. Roy, One Remark On Barely  $\dot{H}^{s_p}$  Supercritical Wave Equations, Analysis And PDE 5-1 (2012), 199-218.

J. Colliander and T. Roy, Bootstrapped Morawetz Estimates And Resonant Decomposition For Low Regularity Global Solutions Of Cubic NLS On  $\mathbb{R}^2$ , Communications On Pure And Applied Analysis, 10 (2011), No.2, 397-414.

T. Roy, Global Existence Of Smooth Solutions To A 3D Loglog Energy-Supercritical Wave Equation, Analysis And PDE, Vol 2, Num 3, 261-280, 2009.

T. Roy, Introduction To Scattering For Radial 3D NLKG Below Energy Norm, Journal Of Differential Equations, 248 (2010), No.4, 893-923.

T. Roy, *Global Analysis Of The Defocusing Cubic Wave Equation In Dimension* 3, Ph.D thesis, LAP LAMBERT Academic Publishing (November 6, 2013).

T. Roy, Adapted Linear-Nonlinear Decomposition And Global Well-posedness For Solutions To The Defocusing Cubic Wave Equation On  $\mathbb{R}^3$ , Disc. Cont. Dynam. Systems A, Vol 24, Number 4, 2009, 1307-1323.

T. Roy, Global Well-posedness For The Radial Defocusing Cubic Wave Equation On  $\mathbb{R}^3$  And For Rough Data, EJDE, 166, 2007, 1-22.

T. Roy, E. Debreuve, M. Barlaud and G. Aubert, Segmentation Of A Vector Field: Dominant Parameter And Shape Optimization, J. Math. Imaging. Vis, Vol 24, Num 2 (2006), 259-276.

NCES Nonlinear Wave and Dispersive Equations, Kyoto University, September 2017

Hyperbolic and Dispersive PDE, Tohoku University, Japan, July 2017

Harmonic Analysis and Nonlinear Partial Differential Equations, Kyoto University, Japan, July 2017

Normal Forms And Large Time Behavior For Nonlinear PDE, Nantes, France, June 2015

Nonlinear Evolution Equations And Related Topics, Kyoto, Japan, Mars 2015

Conferences Attended The 7th Nagoya Workshop On Differential Equations, Nagoya, Japan, Mars 2015

Kyushu Symposium On Partial Differential Equations, January 2015

BIRS workshop, Evolution Equations Of Physics, Fluids, And Geometry: Asymptotics And Singularities, Alberta, Canada, September 2012

Harmonic Analysis And Nonlinear Partial Differential Equations, Kyoto University, Kyoto, Japan, July 2012

RIMS workshop, Recent Developments In Nonlinear Dispersive Equations, Kyoto University, Kyoto, Japan, May 2012

The 4th Nagoya Workshop On Differential Equations, Nagoya University, Nagoya, Japan, March 2012

Nonlinear Dynamics Partial Differential Equations, Kyushu University, Fukuoka, Japan, September 2011

The 36th Sapporo Symposium On Partial Differential Equations, Hokkaido University, Japan, August 2011

Nonlinear Dispersive Equations, CIRM, Marseilles, France, June 2010

Nonlinear Waves And Dispersion, Institut Henri Poincare, France, June 2009

Riviere-Fabes Symposium On Analysis And PDE, University of Minnesota, Minneapolis, USA, 2008

JAMI Conference, Nonlinear Dispersive Equations, John Hopkins University, Baltimore, USA, 2007

Osaka University, Japan, analysis seminar, January 2016 Shizuoka University, Japan, analysis seminar, December 2015 Université de Cergy-Pontoise, France, analysis seminar, June 2015 Saitama University, Japan, analysis seminar, April 2015 The 7th Nagoya Workshop on differential equations, Japan, Mars 2015 Kyushu Symposium on partial differential equations, Japan, January 2015 Hokkaido University, Japon, analysis seminar, December 2014 Hiroshima University, Japan, analysis seminar, November 2014 Kyoto University, Japan, analysis seminar, October 2014 Nagoya University, Japan, analysis seminar, October 2014 Université de Cergy-Pontoise, France, analysis seminar, Mars 2014 Tokyo Metropolitan University, Japan, analysis seminar, July 2013 BIRS workshop, Canada, September 2012 NPDE workshop, Kyoto, Japan, July 2012 Université Paris 12, France, analysis seminar, June 2012 Université Paris 13, France, analysis seminar, June 2012 Université de Cergy-Pontoise, France, analysis seminar, June 2012 Courant Institute, Usa, analysis seminar, April 2012 4th Nagoya Workshop, Japan, Mars 2012 Brown University, Usa, analysis seminar, May 2011 Courant Institute, Usa, analysis seminar, April 2011 University Of Arizona, Usa, analysis seminar October 2010 Courant Institute, Usa, analysis seminar, October 2009

Kyoto University, Japan, analysis seminar, November 2016

TALKS

Princeton University, Usa, analysis seminar, October 2009 Institute for Advanced Study, Usa, September 2009 Université de Tunis, Tunisia, analysis seminar, July 2009 MIT, Usa, October 2008 Chicago, Usa, October 2008 Maryland, Usa, September 2008 John Hopkins, Usa, September 2008 Berkeley, Usa, May 2008 Santa Barbara, Usa, May 2008 Toronto, Fields Analysis Working Group, Canada, February 2008 Ucla, Usa, analysis Seminar, Fall 2007

Service Activities served as a referee for the following journals:

- Journal Of Functional Analysis (1 manuscript)
- Communications On Pure And Applied Analysis (1 manuscript)
- Analysis And PDE (2 manuscripts)
- Differential And Integral Equations (1 manuscript)