

## Stephanie Thomas

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<b>Education</b>	PhD Economics candidate, McMaster University, Hamilton ON MA Economics, University of Western Ontario, London ON BA Economics, McMaster University, Hamilton ON	(expected 2016) 2010 2009
<b>Areas of Interest</b>	Applied Nonparametric Econometric Analysis, Environmental Economics, Experimental Economics, Health Economics	
<b>PhD Advisory Committee</b>	Chair: Professor Jeremiah Hurley ( <i>McMaster University</i> ) Professor Jeffrey S. Racine ( <i>McMaster University</i> ) Professor Emeritus Stuart Mestelman ( <i>McMaster University</i> ) Professor Neil Buckley ( <i>York University</i> )	
<b>Employment</b>	<b>Co-lecturer</b> McMaster Graduate Course 703, Experimental economics · An introduction to the design of laboratory environments in economics, to the conduct of laboratory sessions, and to the analysis of laboratory generated data. Applications to public economics, industrial organization, and the evaluation of economic theory	(Winter 2016)
	<b>Research Assistant</b> , McMaster Experimental Economics Lab, Hamilton ON · Designing Economic Experiments within an established team of researchers · Analyzing experimental data using R and STATA · Programming Economic Experiments using z-tree software	2011–present
	<b>Teaching Assistant</b> , McMaster University, Hamilton ON · Undergraduate Level II Microeconomic theory course · Leading weekly tutorials for ~ 120 students · Administering tests and offering student consultations	Spring 2015
	<b>Teaching Assistant</b> , McMaster University, Hamilton ON · Undergraduate Health Economics · Assessment observation / invited invigilator	Spring 2013
	<b>Teaching Assistant and Course Coordinator</b> , McMaster University, Hamilton ON · Intermediate Macroeconomics (Term 1,2) · Intermediate Microeconomics (Term 1) · Economic Issues (Term 2) · Environmental Economics (Term 2) · Managed TA teams (6–12 assistants, 4 courses, ~180 students/course) · Developed and administered 'Avenue to Learn' course websites · Scheduled and trained assistants for consistent exam monitoring practices · Resolved student and teaching assistant concerns	2010–2011

<b>Teaching Assistant</b> , University of Western Ontario, London ON	2009–2010
<ul style="list-style-type: none"> <li>· Led weekly Introductory Microeconomics tutorial lectures (Term 1 and Term 2)</li> <li>· Prepared and administered weekly quizzes</li> <li>· ~ 80 students over 3 course sections</li> </ul>	
<b>Research Assistant</b> , McMaster Experimental Economics Lab, Hamilton ON	2009
<ul style="list-style-type: none"> <li>· Coded experimental data</li> </ul>	
<b>Outreach Intern</b> , Lura Consulting, Hamilton ON	2008–2009
<ul style="list-style-type: none"> <li>· Developed Environmental Audit Protocols in accordance with current Best Practices</li> <li>· Conducted a small business Corporate Environmental Assessment Report</li> </ul>	
<b>Teaching Assistant and Course Coordinator</b> , McMaster University, Hamilton ON	2007–2009
<ul style="list-style-type: none"> <li>· Intermediate Macroeconomics I</li> <li>· Intermediate Macroeconomics II</li> <li>· Environmental Economics</li> <li>· Economic Issues</li> <li>· Managed TA teams</li> <li>· Developed and administered course websites</li> <li>· Scheduled and trained assistants for consistent exam monitoring practices</li> <li>· Resolved student and teaching assistant concerns</li> </ul>	
<b>Development Assistant</b> , McMaster University Advancement, Hamilton, ON	2006–2007
<b>English Teacher</b> , EF English First, Huizhou, Guangdong, PRC	2003–2005
<ul style="list-style-type: none"> <li>· Gained ~2000 hours of in-class teaching experience with students aged 4 years–senior</li> </ul>	

**Peer-Reviewed Journal Articles**     ‘Support for public provision of a private good with top-Up and opt-Out: A controlled laboratory experiment,’ *Journal of Economic Behavior and Organization*. Vol 111, March 2015. Pages 177-196. with Neil Buckley, Katherine Cuff, Jeremiah Hurley, Stuart Mestelman, and David Cameron

**Working Papers**     ‘Should I Stay or Should I Go? Public provision of a private good with an exit option,’ with Neil Buckley, Katherine Cuff, Jeremiah Hurley, Stuart Mestelman, and David Cameron

**Thesis**     **Chapter 1: Playing by the Rules? An assessment of the agreement between predicted and observed binary choices** This paper proposes a new method for evaluating whether the observations of a lab experiment are consistent with an underlying theoretical model which predicts a single discrete change in an outcome which takes on two values. The observations are optimally smoothed using a Nonparametric approach which is demonstrated to be superior as judged by four widely used model performance criteria. Two novel methods for assessment of a discrete change in the smoothed observations are proposed, using the optimal Youden’s J and maximum absolute gradient of the predictions. Nonparametric bootstrapped confidence intervals are used to evaluate the match of the pattern of the observed responses to that predicted by the theoretical model, taking into account interdependence of observations. The key methodological contributions are the methods proposed for assessing the discrete change within the smoothed observations. The promise of Nonparametric regression for experimental lab data is illustrated in the application while the methods presented are easily extendable to a range of policy applications. The final presentation of the results can be easily communicated to both technical and non-technical audiences.

**Chapter 2: A Standardized Method for the Evaluation of Adherence to Practice Guidelines** Practice guidelines are widely used in medical settings, and a key instrument in control of costs resulting from excess supply of medical care. The objective of this work is to propose a methodology for the effective evaluation of the match of clinical practice data with a practice guideline. The proposed methodology uses a combination of existing analytical techniques which minimize the need for the analyst to specify a functional form for the clinical data. The methodology is illustrated in an application to a set of field data on the supplemental oxygen administration decisions of volunteer medical first responders. The result is a methodology for evaluation of guideline adherence which leverages existing patient care records and is generalizable across clinical contexts. In addition, the results are visually intuitive supporting communication across diverse audiences.

**Chapter 3: Cap-and-trade versus Intensity Targets: Emissions Trading Markets with Stochastic Demand** Two instruments commonly advocated for controlling industrial emissions are cap-and-trade emissions trading, in which an absolute cap on emissions is imposed in the form of tradable permits, and intensity targets, in which firms earn (owe) tradable credits for emissions below (above) a baseline implied by a relative intensity target. Cap-and-trade is commonly believed to be superior to intensity targets because the relative intensity target subsidizes emissions. This paper reports on an experiment designed to test the theoretical predictions of the two approaches in a long-run laboratory environment in which firms make emission abatement technology and output production decisions when demand for output is uncertain and banking of tradable permits may or may not be permitted. Particular focus is placed on testing whether the flexibility inherent to intensity targets can lead them to be superior to cap-and-trade when demand is stochastic. The findings suggest that, relative to cap-and-trade, intensity targets are not as inefficient as theory would predict.

## Presentations

**3rd Workshop on Behavioral and Experimental Health Economics**, Essen FRG      Dec 9-10 2015  
 'Experiments in Mixed Systems of Public and Private Finance for Health Care: Does Framing Matter?'

**Canadian Economics Association Meetings 2015**, Toronto ON      May 29-May 31 2015  
 'Assessing Switch-points in Experimental Lab Data'

**Canadian Economics Association Meetings 2014**, Vancouver BC      May 29-June 1 2014  
 'Cap-and Trade versus Intensity Targets: Emissions Trading Markets with Stochastic Demand'

**Visions in Methodology (VIM) 2014**, Hamilton ON      May 20-22 2014  
 'An Experimental Investigation of the Political Economy of Mixed Systems of Finance'

**2014 Asia-Pacific ESA Conference**, Auckland NZ      Feb 19-21 2014  
 'Cap-and Trade versus Intensity Targets: Emissions Trading Markets with Stochastic Demand'

**Canadian Economics Association Annual Meeting**, Montreal QC      May 30-June 2 2013  
 'An Experimental Investigation of the Political Economy of Mixed Systems of Finance'

**McMaster WISE Annual CREST Conference**, Hamilton ON      Apr 5-6 2013  
 'An Experimental Investigation of the Political Economy of Mixed Systems of Finance'

**Experimental Economics/Decision Workshop**, SSRL Saskatoon SK      Nov 22-23 2012  
 'A dynamic demonstration of experimental lab data'

**2012 North-American ESA Conference**, Tucson AZ      November 15-17 2012  
 'An Experimental Investigation of the Political Economy of Mixed Systems of Finance'

<b>Workshops and External Courses</b>	Chapman University, Orange CA 'The iFREE 16th Annual Visiting Graduate Student Workshop in Experimental Economics'	January 2011
	The University of Guelph, Guelph ON 'Economics 6100 - Experimental Economics,' Professor C. Bram Cadsby	Fall 2011
	The University of Western Ontario, London ON 'The Teaching Assistant Training Program'	August 2009
<b>Software</b>	R, LaTeX, knitr, STATA, MATLAB z-Tree	
<b>Scholarships and Awards</b>	Ontario Graduate Scholarship	2009-2012
	Dr. Harry Lyman Hooker Scholarship	2008
	Class of '50 Honours Economics Scholarship	2008
	University Senate Scholarship	2007
	Dean's Honour List	2006-2008
<b>Administrative Contributions</b>	Graduate Curriculum and Policy Committee of the Department of Economics	2013-2014
	McMaster Graduate Student Council Faculty Representative	2011-2012
	Undergraduate Departmental Chair Selection Committee	2009
	University Faculty Council	2007-2009
<b>Professional Memberships</b>	Member: Canadian Economics Association	2013-current
	Member: Economic Science Association	2013-current
<b>Extra Curriculars</b>	Corporal: St John Ambulance Unit D0007	May-Sept 2015
	Medical First Responder: St John Ambulance Unit D0007	Nov 2014-May 2015
	Observer: St John Ambulance Unit D0007	May-Nov 2014
	Flutist : McMaster Marching Band	Fall 2012
	President: McMaster Economics Society	2007-2009
	Volunteer: Learning and Fun (LAF) after school homework program	2007-2009