# Xingye Wu

December 2017

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#### **Education**:

2018 (expected)	Ph.D. in Economics	Columbia University
2014	M.A. in Economics	Columbia University
2012	B.A. in Economics	Tsinghua University

#### **Honors and Awards:**

2017 - 2018	<b>Dissertation Fellowship</b> , Department of Economics, Columbia University
2017	Presidential Teaching Award, Columbia University
2017	Wueller Teaching Award, Department of Economics, Columbia University
2016	Wueller Teaching Award, Department of Economics, Columbia University
2013 - 2014	Ralph Erdman Holben Fellowship, Columbia University
2012 - 2017	Dean's Fellowship, Columbia University

#### **Research Interests:**

Microeconomic Theory, Mechanism Design, Matching Theory

# **Teaching Interests:**

Microeconomics at any level, Math for economics students

## Job Market Paper:

## Core of Convex Matching Games: A Scarf's Lemma Approach

The core of a matching game is often empty when the market does not have a two-sided structure, contracts are multilateral, or agents have complementary preferences. In this paper, I use Scarf's lemma to show that given a convexity structure that I introduce, the core of a matching game is always nonempty, even if the game has an arbitrary contracting network, multilateral contracts, and complementary preferences. I provide three applications to show how the convexity structure is satisfied in different contexts by different assumptions. In the first application, I show that in large economies, the convexity structure is satisfied if the set of participants in each contract is small compared to the overall economy. Remarkably, no restriction on agents' preferences is needed beyond continuity. The second application considers finite economies, and I show that the convexity structure is satisfied if all agents have convex, but not necessarily substitutable, preferences. The third application considers a large-firm, many-to-one matching market with peer preferences, and I show that the convexity structure is satisfied under convexity of preferences and a competition aversion restriction on workers' preferences over colleagues. Because of the convexity structure, all three applications have a nonempty core.

### **Work in Progress:**

- "Consistency Implication of Expected Utility Models"
- "Credible Bayesian Persuasion"
- "Dynamic Matching in Large Markets"
- "Generalized Taxation Principle"

# **Teaching Experience:**

### Courses Taught as **Instructor** at Columbia University:

2016 Economics Ph.D. Math Camp2015 Economics M.A. Math Camp

# Courses Taught as **TA** at Columbia University:

2016 Fall	Ph.D. Microeconomics I, Qingmin Liu and Bernard Salanie
2016 Spring	M.A. Microeconomics II, Qingmin Liu and Christian Gollier

2015 Fall M.A. Math Methods for Economists, Rajiv Sethi's pilot online course

2015 Spring Advanced Microeconomics, Susan Elmes

2014 Fall Introduction to Econometrics, Seyhan Erden Arkonac 2014 Spring Introduction to Econometrics, George Steven Olley

2013 Fall Ph.D. Microeconomics I, Konrad Mierendorff and Pierre-Andre Chiappori

#### **Invited Seminars and Conference Presentations:**

2017 Micro Student Lunch, New York University

2016 Conference on Market Design and Micro Theory, Seoul National University

### **References:**

#### Yeon-Koo Che (advisor)

Kelvin J. Lancaster Professor of Economic Theory
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Columbia University
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#### Jacob Leshno

Assistant Professor
Decision, Risk, and Operations
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# **George Steven Olley** (teaching reference)

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#### **Qingmin Liu**

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## Rajiv Sethi (teaching reference)

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