

# Peter Doe

California Institute of Technology  
1200 E California Blvd MC 228-77  
Pasadena, CA 91125

Website: [www.peterdoe.com](http://www.peterdoe.com)  
Email: [pdoe@caltech.edu](mailto:pdoe@caltech.edu)  
Mobile: +1 (281) 619-0558

## EDUCATION

Ph.D., Economics, **California Institute of Technology**, expected in 2025

Committee: Luciano Pomatto (co-advisor), Federico Echenique (co-advisor), Omer Tamuz (chair), Charlie Sprenger

B.B.A., *summa cum laude*, Economics, Mathematics, Statistics, Baylor Business Fellows, **Baylor University**, 2020

## FIELDS & INTERESTS

Market Design, Microeconomic Theory, Game Theory, Behavioral Economics, Computational Economics

## REFERENCES

[Federico Echenique](#)  
Professor of Economics, UC Berkeley  
[fede@econ.berkeley.edu](mailto:fede@econ.berkeley.edu)

[Luciano Pomatto](#)  
Professor of Economics, Caltech  
[luciano@caltech.edu](mailto:luciano@caltech.edu)

[Omer Tamuz](#)  
Professor of Economics and Mathematics,  
Caltech  
[tamuz@caltech.edu](mailto:tamuz@caltech.edu)

## WORKING PAPERS

1. [Matching With Pre-Existing Binding Agreements: The Agreeable Core \(Job Market Paper\)](#)
2. [Ranked-to-Match: The Effects of Early Matching in the NRMP](#)

## GRANTS & AWARDS

Stephen A. Ross Memorial Fellowship, Caltech, 2024  
Highest Ranking Man in the Hankamer School of Business, Baylor, 2020  
Scholars Week Award for Outstanding Poster Presentation, Baylor, 2020  
Undergraduate Research and Scholarly Achievement Small Grant, Baylor, 2019  
Regents' Gold Scholarship, Baylor, 2016-2020

Additional Regents' Gold Scholarship, Baylor, 2016-2020  
National Merit Scholarship, National Merit Scholarship Corporation, 2016-2020  
Schultz-Werba Mathematics Scholarship, Baylor, 2018-2020  
Janet Rhines Economics Scholarship, Baylor, 2018-2020  
Ted and Sue Getterman Honors College Scholarship, Baylor, 2016-2019  
Earl and Maxine Bodine Scholarship, Baylor, 2017

## **SEMINAR & CONFERENCE PRESENTATIONS**

2024: ACM Conference on Economics and Computation (EC, poster presentation)  
2023: Baylor University

## **TEACHING**

Teaching Assistant, California Institute of Technology

SS 201A Analytical Foundations of Social Science, Fall 2021, Fall 2023  
SS 201B Analytical Foundations of Social Science, Winter 2021, Winter 2023  
SS 201C Analytical Foundations of Social Science, Spring 2021, Spring 2023  
SS 202A Political Theory, Fall 2021, Fall 2023  
SS 202B Political Theory, Winter 2022, Winter 2024  
SS 202C Political Theory, Spring 2022, Spring 2024  
SS 205A Foundations of Economics, Fall 2021, Fall 2023  
SS 205B Foundations of Economics, Winter 2022, Winter 2024  
SS 205C Foundations of Economics, Spring 2022, Spring 2024  
SS 222A Econometrics, Fall 2021, Fall 2023  
SS 222B Econometrics, Winter 2022, Winter 2024  
SS 222C Econometrics, Spring 2022, Spring 2024  
CMS/CS/EE/IDS 144 Networks: Structure and Economics, Winter 2023  
Ec 117 Matching Markets, Spring 2023

Note: SS is social science, CMS is computing + mathematical sciences, IDS is information and data sciences

## **MISC**

Programming: Proficient in R, familiar with Mathematica and C++

## WORKING PAPER ABSTRACTS

### 1. [Matching With a Status Quo: The Agreeable Core \(Job Market Paper\)](#),

*Abstract.* I analyze two-sided matching markets with pre-existing binding agreements between market participants. In this model, a pair of participants who are bound to each other by a pre-existing agreement must mutually agree to any action taken by the pair. I propose a new solution concept, the agreeable core, consisting of the matches which cannot be renegotiated without violating the binding agreements. The main contribution of this paper is an algorithm that constructs such a match by a novel combination of the Deferred Acceptance and Top Trading Cycles algorithms. I show that my algorithm is robust to various manipulations and it has applications to numerous markets including the resident-to-hospital match, college admissions, school choice, and labor markets.

### 2. [Ranked-to-Match: The Effects of Early Matching in the NRMP](#)

*Abstract.* I study a behavioral model of early matching within the context of the National Resident Matching Program. In my model, two hospitals choose to give early offers to doctors prior to a stable match. Some doctors have a behavioral preference to match early while others do not. I show that the less-desirable program benefits from the option to make early offers. My results provide a theoretical foundation for behavior widely documented within the medical ethics and graduate medical education literature and confirm beliefs commonly held by residency program directors.