

The Los Angeles Behavioral Economics Laboratory (**LABEL**) is a research center led by Dr. Isabelle Brocas and Dr. Juan Carrillo, dedicated to the study of decision-making and its implications on life outcomes and markets. For more information on **LABEL**, please visit our **website**.

New Reports

Coloring networks

We discuss groundbreaking insights from Kearns' experiments, revealing how different network architectures significantly influence the effectiveness and strategies of problem-solving in social networks. The findings underscore the crucial role of network configurations in determining both the challenges and the outcomes of complex decision-making scenarios. This work not only



advances our understanding of distributed problem-solving but also illuminates the broader implications for managing and optimizing social and economic systems in an increasingly interconnected world.

I. Brocas and A. Victoria, "Social Networks and the Coloring Problem", LABEL reports April 2024



Rediscovering Economic Models through Physicist's Methods

This report explores the interdisciplinary field of econophysics, which applies principles and methods from physics to analyze economic phenomena and financial markets. By leveraging concepts from statistical mechanics and quantum mechanics, econophysicists examine economic systems as dynamic entities, drawing parallels between economic agents and

interacting particles. The report highlights significant contributions of econophysics, such as the use of random walk models to understand asset price movements and the development of models that can capture abrupt market behaviors and economic crises. It discusses the Ising model to illustrate how microscopic interactions can lead to macroscopic phenomena, such as sudden shifts in market trends or collective economic behaviors. This approach not only offers new insights into economic dynamics but also challenges traditional economic theories by providing a more nuanced understanding of market complexities and the effects of external shocks.

A. Victoria and I. Brocas, "Rediscovering Economic models through physicist's methods: An overview of Econophysics", LABEL reports, April 2024

For more information about our research, please check here.

For a full list of our reports, check here.

LABEL High School Journal

Risk and the Teen Brain

Risk-taking behavior is caused by activity in multiple brain regions, which is often activated at different levels in adolescents compared to adults. The article discusses how this tendency is especially evident in both the ventral striatum and the prefrontal cortex. The ventral striatum levels in adolescents tend to be higher, causing them to pursue high risk in search of reward; the prefrontal cortex is undergoing development in adolescents, impairing cognitive abilities. As a result, teenagers' risk-taking behavior can lead to unfavorable consequences, especially in matters such as driving. By exploring risk in teens further, we can create better



safety measures to limit prevalent issues that teens often face.

Unraveling the Science Behind Adolescents' Risky Behaviors, S. Gupta, LABEL High School Journal, April 2024

Our students

Trainee Achievements

We would like to congratulate our trainees on a wonderful year, and are excited to announce where they're headed next!



Sonika Gupta, our latest High School Journal author, is graduating this year from West Windsor Plainsboro High School North, and will be attending NYU Stern in the fall, where she'll be studying business!





Jinghzi Liu will be headed to Penn State University (Smeal College of Business) for a PhD in Business Administration with a focus on Marketing!



Xidi Zhang will attend the University of Notre Dame for a Ph.D. in Economics!

Dissemination

Check Isabelle's blog "**Biology**, **Development**, **and Behavior**" on Psychology Today Juan's interview about "the economist's brain: Tracing Choices with Neuroeconomic Insights" on **Game Changer**

Events



Upcoming events

Mark your calendar for the upcoming LAX conference, September 27, 2024 at Caltech!

Register here to attend the LABEL Seminar

Series on zoom

Check our current and future events here.

Announcements

Education at USC

LABEL disseminates knowledge regarding decision-making and the methods to study it. We sponsor **several courses and programs** for undergraduate, master and PhD students at USC, all designed for students who wish to explore careers in the Behavioral Sciences as consultants, researchers or policy makers.

Training the next generation of students

The **Little Experimentalists Program** organizes events in schools to teach students how to think startegically and to inform parents and teachers about the development of cognition and decision-making.

The **LABEL Training Program** offers students (10th grade and up) the opportunity to participate in research activities in our group. Read about our trainees' experiences **here**. Our lab is currently accepting **applications** for academic year 2024-2025 (deadline is June 15).



Participate in our studies

If you are an undergraduate **student** at USC, register **here**.

If you are a **parent living in Los Angeles** and would like your child to participate in our studies, register **here**.

If you are **living in Los Angeles and are 18 and older** and would like to participate in our studies on decision-making over the life cycle, register **here**.

All others, please contact us at label@dornsife.usc.edu



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