



PROGRAM

September 27, 2025

Harvard University
Science Center, Lecture Halls C and D
1 Oxford Street
Cambridge, Massachusetts 02138

Symposium Organizing Committee:

Mark E. Glickman, Department of Statistics, Harvard University – Co-chair

Scott R. Evans, Department of Biostatistics and Bioinformatics, George Washington University – Co-chair

Premium Sponsor:

- Teamworks (<https://teamworks.com/>)

Teamworks Intelligence is the leading sports analytics solution backed by a world-class team of data scientists, engineers, and product leaders. Our platforms deliver sport-specific predictive models and metrics that help teams tackle the most complex challenges in sports analytics.

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- Cambridge Sports Analytics (<https://www.csanalytics.io/>)
- Cleat Street (<https://www.cleatstreet.com/>)
- Section on Statistics in Sports of the American Statistical Association (<https://community.amstat.org/sis/home>)

Wifi access:

Free guest wifi access will be available for conference participants in the Science Center. Please follow these instructions:

- With your laptop or mobile device's wifi turned on, choose "Harvard University" Wireless Network (SSID).
- Open a browser and go to <https://getonline.harvard.edu>. Select "I am a guest" from that page.
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Talk and Poster Abstracts:

Abstracts for all talks and posters are available online at

<https://nessis.org/abstracts-only25.pdf>, or by scanning the following QR code:



Participant List:

The list of 2025 NESSIS participants can be accessed at

<https://nessis.org/NESSIS-2025-participants.pdf>, or by scanning the following QR code:



This list includes only those participants who opted to share their names and affiliations. This file is not linked from the site and will be removed one week after the conference concludes.

Acknowledgments:

We wish to thank everyone who helped to make NESSIS possible. Special thanks go to the Harvard University Statistics Department, Kevin Rader, Jeffrey Zhou, Ethan Tan, Soham Gupta, Tom Federico, Dayanara Torres, Emily Palmer, Emma Soucy, Ron Cooper, Andrew Swift, Mike Zarren, Greg Matthews, Ryan McShane, Brian Macdonald, and the Harvard Sports Analysis Collective (HSAC) for their parts in helping with the symposium.

2025 New England Symposium on Statistics in Sports

September 27, 2025

Breakfast and Registration: Foyer area

8:00am – 9:15am: Coffee, tea, pastries

Welcome Address: Lecture Hall C

9:15am – 9:30am: Mark Glickman and Scott Evans

Morning Session: Lecture Hall C - Foundations of Sports Metrics

- 9:30am – 10:00am: Ben Baumer and Sarah Susnea, Smith College
“Reward Systems in Sports: Who’s the Fairest of Them All?”
- 10:00am – 10:30am: Robert Bajons, Vienna University of Economics and Business
“rMetrics: A Statistically Motivated Framework for Player Evaluation using Residualized Scores”
- 10:30am – 11:00am: Jonathan Pipping, University of Pennsylvania
“A Paradox of Blown Leads: Rethinking Win Probability in Team Sports”

Break: Foyer area

11:00am – 11:30am: Coffee and tea

Late-morning Parallel Sessions

11:30am – 1:00pm: Lecture Halls C and D

Lecture Hall C - Modern NFL Analytics: Defense, Movement, and Strategy

- 11:30am – 12:00pm: Ben Jenkins, Florida Atlantic University
“Tackling Causality: Estimating Frame-Level Defensive Impact with Multi-Agent Transformers”
- 12:00pm – 12:30pm: Quang Nguyen, Carnegie Mellon University
“NFL CoD: A Bayesian Circular Mixed-Effects Model for Explaining Variability in Directional Movement in American Football”
- 12:30pm – 1:00pm: Rouven Michels, Bielefeld University
“The Best of Both Worlds: Predicting Football Coverages with Supervised and Unsupervised Learning”

Lecture Hall D - Decisions and Context in Team Sports

- 11:30am – 12:00pm: Ava Uribe and Shane Sanders, Syracuse University
“Do Behavioral Considerations Cloud Soccer Penalty-Kick Location-Optimization? Game Theory, GAM, and Lasso Analysis”
- 12:00pm – 12:30pm: Jason A. Osborne, North Carolina State University
“Personnel-Adjustment for Home Run Park Effects in Major League Baseball”
- 12:30pm – 1:00pm: Tobias Harringer, Vienna University of Economics and Business
“Expected Pass Value (xPV): A Holistic Framework for Evaluating Passing Situations in Soccer”

Lunch break: Foyer area

1:00pm – 2:00pm: Sandwiches, beverages, snacks

Afternoon Parallel Sessions

2:00pm – 3:30pm: Lecture Halls C and D

Lecture Hall C - Movement and Shot Dynamics

- 2:00pm – 2:30pm: Ruoqian (Judy) Zhu, Massachusetts Institute of Technology
“Ball Path Curvature and In-Game Free Throw Shooting Proficiency in the National Basketball Association”
- 2:30pm – 3:00pm: Joe Gratz, Stathletes
“The Impact of Skating Speed and Style with Tracking Data”
- 3:00pm – 3:30pm: Guanyu Hu, The University of Texas
“What Influences the Field Goal Attempts of Professional Players?”

Lecture Hall D - Methodological Advances in Sports Analytics

- 2:00pm – 2:30pm: Ronald Yurko, Carnegie Mellon University
“College Football Volatility: A Bayesian State-Space Model of the Transfer Portal and NIL Impact”
- 2:30pm – 3:00pm: Guoqing Diao, George Washington University
“Fast Algorithm for Calculating Probability of Chess Winning Streaks”
- 3:00pm – 3:30pm: Marcos Matabuena, Harvard University
“Digital Health in Sport Science”

Poster Session: Foyer area

3:30pm – 5:00pm: With snacks and beverages

Panel Discussion: Lecture Hall C

5:00pm – 6:30pm: *“Inside the Game: How Sports Analytics Companies Are Changing the Playbook”*

Moderator: Keith Willoughby – Edwards School of Business, University of Saskatchewan

Panelist: Meghan Chayka – Stathletes

Panelist: Rob Sawyer – Big League Advantage

Panelist: Doug Fearing – Teamworks

Post-NESSIS Get-Together

6:30pm – 9:30pm: Tasty Burger, Harvard Square
40 JFK Street, Cambridge, MA 02138
(on the corner of JFK St. and Mt. Auburn St.)
<https://www.tastyburger.com/>

Please head downstairs after entering the restaurant.
Food provided; Cash bar only.