PENN STATE SPORTS ANALYTICS CONFERENCE APRIL 12-13, 2018

PennState

Center for the Study of Sports in Society

SCHEDULE

THURSDAY, APRIL 12
(The State Theatre)

7 p.m.: Keynote Speaker
John Urschel

FRIDAY, APRIL 13
(Ballroom C, Nittany Lion Inn)

7:30 a.m.: Registration

8:30 a.m.: Panel, Concussion Research
Dr. Steven Broglio, University of Michigan
John Urschel, Penn State

9:45 a.m.: Panel, Statistics in Sports
Dr. Mark Broadie, Columbia University
Chris Pang, New York Mets
Dr. Sam Ventura, Pittsburgh Penguins

11-11:45 a.m.: Poster Competition

Noon-1 p.m.: Lunch

1:15 p.m.: Panel, Gender Disparity in Sports Analytics
Melanie Harris, Pittsburgh Steelers
Corinne Landrey, Philadelphia Phillies
Dr. Ivana Seric, Philadelphia 76ers

2:30 p.m.: Data Use in Sports Journalism/Broadcasting
Marty Aronoff, Talent Statistician
Ben Bouma, Seattle Sports Assets, LLC

3:45 p.m.: Panel, Research in Sports Technology
Dr. Kevin Black, Penn State
Dr. Conrad Tucker, Penn State

5 p.m.: Announcement of Poster Winners, Concluding Remarks

KEYNOTE SPEAKER
John Urschel

John Urschel, a doctoral candidate in applied mathematics at MIT, is a former Penn State football captain and NFL player. Urschel played college football from 2010 to 2013 at Penn State, where he earned bachelor's and master's degrees in mathematics. While at Penn State, he was awarded the William V. Campbell Trophy, known as the "academic Heisman." He also earned the James E. Sullivan Award and was a recipient of the Senior CLASS Award. An offensive lineman, he was a two-time All-Big Ten selection and later played three seasons for the Baltimore Ravens in the NFL before retiring prior to the 2017 season. In January 2017, he was named to Forbes' "30 under 30" list of outstanding young scientists. He has published peer-reviewed articles in mathematics and is an advanced statistics columnist for The Players' Tribune.

FRIDAY PANEL
Concussion Research

Dr. Steven Broglio is an associate professor at the University of Michigan in the School of Kinesiology and departments of neurology and physical medicine and rehabilitation. He is director of the NeuroTrauma Research Laboratory and the concussion lead for the University of Michigan Injury Center. He completed his training at the University of Georgia and took his first faculty position in the Department of Kinesiology and Community Health at the University of Illinois. He has been at Michigan since 2011 with research continually focused on improving athlete health and safety through injury prevention, early recognition and management of concussive injuries.

John Urschel is a doctoral candidate at MIT, a former NFL player and Penn State alumnus.

FRIDAY PANELS

Statistics in Sports

Dr. Sam Ventura is the director of hockey research for the Pittsburgh Penguins and an affiliated faculty member in Carnegie Mellon University's Department of Statistics & Data Science. Before that, he was a professor of statistics at CMU, where he also earned his Ph.D. (2015) and master's degree (2011), both in statistics, as well as his bachelor's (2010) in computational finance and statistics. He has published papers on statistics in sports and is an associate editor for the Journal of Quantitative Analysis in Sports. He co-founded (with Andrew Thomas) war-on-ice.com in 2014, which quickly became one of the most popular websites for hockey analytics. (@stat_sam)

Dr. Mark Broadie is the Carson Family Professor of Business at Columbia Business School. His research addresses issues in quantitative finance and sports analytics and, more generally, methods for decision making under uncertainty. He developed the strokes gained golf stats that are used by the PGA Tour and the European Tour. He works with a number of PGA Tour coaches and players, and writes a monthly column for GOLF magazine. His New York Times bestseller, "Every Shot Counts," uses data and analytics to measure and improve golf performance and strategy. (mnb2@columbia.edu, @MarkBroadie)

Chris Pang is an analyst in baseball research and development for the New York Mets. His role is to build predictive models to support the decision-making process of the baseball operations department. Before joining the Mets, Pang worked as a software engineer. He is a graduate of Yale University, where he studied applied physics. (cpang@nymets.com)

FRIDAY PANELS

Gender Disparity in Sports Analytics

Melanie Harris joined the Pittsburgh Steelers as business analytics manager in March 2016. Before that, she was a manufacturing manager for Nike. She also previously served as director of ticket sales and analytics for the Washington Kastles of World TeamTennis and as a business analyst for Athletes for Hope. Harris earned her bachelor's degree in industrial and manufacturing engineering from Penn State in 2002, and her MBA in sports management from San Diego State University in 2010, when she was the valedictorian of her class.

Dr. Ivana Seric has worked as a data scientist for the Philadelphia 76ers since summer 2017. She is a Ph.D. graduate from the Department of Mathematical Sciences at NJIT and worked on a thesis in computation fluid dynamics. She graduated with a bachelor's degree in applied mathematics from NJIT in 2011 and started her Ph.D. studies the following semester. During her undergraduate studies, she was a member of NJIT women's basketball team. Prior to NJIT, she played for the Croatian national U16 and U18 teams for four years.

Corinne Landrey joined the Philadelphia Phillies baseball operations department in 2017 as an intern and was promoted to analyst, baseball research and development, in October of that year. Previously, she worked as a public baseball analyst writing for outlets including MLB.com, FanGraphs, and The Hardball Times. A graduate of the Ithaca College School of Music, Landrey spent three years as a high school band teacher before transitioning to her work in baseball analytics. (clandrey@phillies.com)

FRIDAY PANELS

Data Use in Sports Journalism/Broadcasting

Marty Aronoff is a preeminent sports statistician, working live broadcasts for networks such as ESPN, Fox and TNT. A 1960 Penn State graduate (mathematics), Aronoff logs more than 300,000 miles annually, traveling from his home in Washington, D.C., and supplying information and numbers that are shared on TV with millions of viewers every year. Aronoff works nearly 210 games each year. His regular assignments include college football and basketball, Major League Baseball, the NFL and the NBA. Aronoff has worked 21 World Series, 14 NBA Finals and nine NCAA Final Fours. (martystats@aol.com / @martystats)

Ben Bouma is co-owner and CEO of Seattle Sports Assets, LLC, helping lead the development of an NHL franchise in that city. For the past quarter-century-plus he has worked at the highest levels of professional sports management. A Penn State alumnus (1993, business), he currently serves as a consultant, producer and statistician for ESPN, Fox, the MLB Network and Turner Sports. As a producer he develops content, format, direction and structure for live TV sports coverage — including ESPN's MLB Home Run Derby broadcasts. He works on Fox Sports broadcasts of the NFL and exclusively as an associate producer/statistican with Emmy Award-winning broadcaster Mike "Doc" Emrick.

FRIDAY PANELS

Research in Sports Technology

Dr. Conrad Tucker holds a joint appointment as associate professor in engineering design and industrial and manufacturing engineering at Penn State. He is also an affiliate faculty member in computer science and engineering. Tucker is the director of the Design Analysis Technology Advancement Laboratory. His research focuses on the design and optimization of systems through the acquisition, integration and mining of large scale, disparate data. Tucker has served as PI/co-PI on several federally funded grants from the National Science Foundation (NSF), the Air Force Office of Scientific Research, the Defense Advanced Research Projects Agency and the Office of Naval Research. He earned his Ph.D., master's (industrial engineering), and MBA degrees from the University of Illinois, and his bachelor's in mechanical engineering from Rose-Hulman Institute of Technology. (ctucker4@psu.edu)

Dr. Kevin Black is the C. McCollister Evarts Professor and chair of the Department of Orthopaedics and Rehabilitation at Penn State. He is also vice dean for the University Park Regional Medical Campus. Black began his career at the Medical College of Wisconsin in 1987, where he developed the Sports Medicine Program. He joined Penn State in 1993, and in September of 2001 became chairman of the Department of Orthopaedics and Rehabilitation. He serves as director of the American Academy of Orthopaedic Surgeons' "Orthopaedic Educators Course," the longest-running educational program within the academy, as well as co-director of the American Orthopaedic Association "Becoming a More Effective Educator" course. His clinical interests and associated research interests include knee ligament injuries, osteochondritis dissecans, patella instability and meniscal injuries. (kblack@pennstatehealth.psu.edu)

ABOUT US

Center for the Study of Sports in Society

Penn State features a broad array of educators, practitioners and researchers whose professional work involves sports. Through collaborations and events organized by the multi-disciplinary Center for the Study of Sports in Society, those numerous experts across campus have the opportunity to collaborate. Those involved with the Center share information and research, organize programs featuring speakers on topics of mutual interest, and cooperate to enhance the educational experience for students. The group's mission has been to incubate and facilitate discussion between academics, industry executives, and policymakers about research, regulation, and reforms with regard to professional, intercollegiate, youth, and club-level amateur sports.
https://centerforsports.psu.edu/

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ADDITIONAL FRIDAY PANELIST

Data Use in Sports Journalism/Broadcasting

Matt Millen, an All-American football player at Penn State and a four-time NFL Super Bowl champion linebacker, is an experienced broadcaster and the lead game analyst for the Big Ten Network. A four-year letterman at defensive tackle for Penn State from 1976-79, Millen was a member of Nittany Lions teams that posted a combined 37-11 record. He played 12 seasons in the NFL as a linebacker with Oakland, San Francisco and Washington, twice earning first-team All-Pro honors. Millen pursued broadcasting after his retirement, joining CBS as an analyst for its NFL game telecasts in 1992, before signing on with the upstart Fox Sports for its presentation of the NFC package in 1994. He later also served as a color analyst for "Monday Night Football" games on Westwood One Radio. In 2001, he moved from the broadcast booth to the front office when he was named team president for the Detroit Lions, a position he held until 2008. Millen returned to broadcasting in 2009 with ESPN, performing both college and pro football analyst duties through 2014. He has been with BTN since 2015. HIs wife Patty (Spisak) is a former Penn State gymnast.

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