STATISTICAL METHODS FOR HIGH DIMENSIONAL COMPLEX DATA

CONFERENCE IN HONOR OF DR. RAYMOND CARROLL

The Statistical Methods for High Dimensional Complex Data Conference, held in honor of Dr. Raymond Carroll, took place from Thursday, May 23, 2024, to Friday, May 24, 2024, at the Hilton Hotel and Conference Center in College Station. Organized by a distinguished panel including Bani Mallick from Texas A&M University, Ciprian Crainiceanu from John Hopkins Bloomberg School of Public Health, Irina Gaynanova from the University of Michigan, Mikyoung Jun from the University of Houston, Yehua Li from the University of California Riverside, Jeffrey Morris from the University of Pennsylvania, and Huiyan Sang from Texas A&M University, the conference featured a packed schedule of presentations and discussions.

The conference kicked off on Thursday with a session focusing on Measurement Error, featuring talks by Yanyuan Ma, Len Stefanksi, and Anna Maria Staicu. This was followed by a session on Genomics & Epidemiology with presentations by Victor Kipnis, Xihong Lin, and Kathryn Roeder.

The day included a special Carroll Sharing session led by Jeff Morris, where former students and colleagues shared about Dr. Carroll's career and lasting impressions. The session conclude with the Carroll Young Investigator Award Lecture, delivered by the awardee Dr. Alexander Luedtke. The topic of Dr. Luedtke's talk was Simplifying Debiased Inference via Automatic Differentiation and Probabilistic Programming.

Dr. Luedtke is an Associate Professor in the Department of Statistics at the University of Washington. He also has an adjunct appointment in the Department of Biostatistics and an affiliate appointment in the Vaccine and Infectious Disease Division at the Fred Hutchinson Cancer Research Center. His methodological research focuses on developing efficient estimators in problems arising in a variety of areas, including in policy learning and infectious disease studies. He derives such estimators analytically using tools from semiparametric efficiency theory and numerically using minimax optimization schemes. He also serves as a study statistician for the HIV Vaccine Trials Network and the Covid-19 Prevention Network.

Drs. Brani Vidakovic, Alexander Luedtke and Raymond Carroll (left to right)

Friday's sessions began with a focus on Regression, featuring talks by Hans-Georg Mueller, Jane-Ling Wang, and Naisyin Wang. The day continued with a session on Robustness and Bayesian Methods, including presentations by Doug Simpson, Edward George, and Alicia Carriquiry. The conference provided a platform for young investigators to showcase their research at the Young Investigator Presentations session.

One of the key highlights of the conference was the diverse range of topics covered, which reflected the multifaceted nature of high-dimensional complex data problems. From measurement error and genomics to robust statistical methods and Bayesian approaches, the sessions underscored the breadth of Dr. Carroll's influence and the ongoing advancements in these areas. The event also facilitated meaningful networking opportunities, enabling participants to discuss potential collaborations and share their latest research findings in an engaging and supportive environment.

Drs. Kathryn Roeder, Bani Mallick, Raymond Carroll and Jiayi Tong (left to right)

Overall, the conference served not only as a platform for advancing the field of statistics but also as a heartwarming reunion for former students, friends, colleagues, and relatives of Dr. Raymond Carroll. The gathering celebrated both his birthday and illustrious career, bringing together a community deeply impacted by his contributions to the field. This celebratory atmosphere underscored the profound and lasting legacy of Dr. Carroll's work, making the event a memorable tribute to his enduring influence in the world of statistics.