MATH 125 Draft Schedule – Updated 4/11/2023

Thursday, April 27, 2023 – **Courtyard by Marriott**
6:00 – 8:00 pm Reception

Friday, April 28, 2023 – **NIC Conference Center**
8:15   Registration begins
8:45 am   Opening session

9:05 am   **John Meakin**, Milton Mohr Emeritus Professor of Mathematics at UNL
                Title: *Research and graduate education in mathematics at the University of Nebraska-Lincoln: a pocket history*

9:55 am   **Gopi Shah Goda**, Senior Fellow at the Stanford Institute for Economic Policy Research at Stanford University
                Title: *Lessons Learned from Math 107H to the White House*

10:45 am   Break (Coffee and Snacks)

11:15 am   Special Session Talks #1
                ▪ 11:15 – 11:35
                ▪ 11:45 – 12:05

12:15 pm   Lunch

1:15 pm   **Michael Parks**, Director, Computer Science and Mathematics Division, Oak Ridge National Laboratory
                Title: *Real-World Impacts of Mathematics*

2:15 pm   Panel: *My graduate school experience. Reflections from women who earned PhDs at UNL.*
                Panelists: **Raegan Higgins** (2008), **Katie Morrison** (2012), **Jennifer Mueller** (1997), **Kristin Pfabe** (1995), and **Karina Uhing** (2020)

3:05 pm   Break

3:30 pm   **Jane Meza**, UNMC Associate Vice Chancellor, Office of Global Engagement and Professor, Department of Biostatistics
                Title: *What I learned from the question I asked as an undergraduate: What can I do with a math degree?*

4:30 pm   Special Session Talks #2
                ▪ 4:30 – 4:50
                ▪ 5:00 – 5:20

5:30   Cash Bar Reception before Banquet
6:00   Banquet

Judy Walker, Aaron Douglas Professor of Mathematics and UNL Associate Vice Chancellor for Faculty and Academic Affairs
Title: *Women in Math at Nebraska*

Saturday, April 29 – Avery Hall
8:00 – 10:00   Registration

8:30   Panel: *Using mathematics outside of academia.*
             Panelists: **Josh Brown-Kramer** (Ocuvera), **Paula Egging** (Bryan Health), **Jesse Moeller** (SpaceX), **Michael Parks** (Oak Ridge), **Laura White** (NASA)

9:30   **Graham Leuschke**, Professor and Chair, Department of Mathematics, Syracuse University
             Title: *Climbing the Chimney*

10:20   Break

10:45   Special Session Talks #3
             ▪ 10:45 – 11:05
             ▪ 11:15 – 11:35
             ▪ 11:40 – 12:00
12:10   Closing session

Special session speakers

Day and Time	Faculty Research	Achievements of our Graduates	Math Outside Academia	Math Education
Friday 11:15	Yu Jin	Jennifer Mueller	Laura White	Allan Donsig
Friday 11:45	Mikil Foss	Katie Morrison	Amy Bouska	Raegan Higgins
Friday 4:30	Xavier Pérez	Karina Uhing	Derek DeSantis	Kristin Pfabe
Friday 5:00	Chris Schafhauser	Josh Pollitz	Levi Heath & Gabe Payson	Matt Larson
Saturday 10:45	Mark Brittenham	Paula Egging	Josh Brown Kramer & Lucas Sabalka	Michelle Homp
Saturday 11:15	Tom Marley	Anisah Nu'man	Brittney Keel-Mercer	Delise Andrews
Saturday 11:30	Yvonne Lai	Jesse Moeller	Lisa Davis	Katie Soto

Special Session Themes: Special Sessions are organized around the following themes.

- **Faculty research**
  - Mark Brittenham, Professor, UNL Department of Mathematics
    Title: *Topological conjecture-busting*
  - Mikil Foss, Professor, UNL Department of Mathematics
  - Xavier Perez Gimenez, Associate Professor, UNL Department of Mathematics
  - Yu Jin, Associate Professor, UNL Department of Mathematics
    Title: *Mathematical modeling and analysis in population dynamics*
  - Yvonne Lai, Milton Mohr Associate Professor, UNL Department of Mathematics
    Title: *115 years since Felix Klein's naming of the Double Discontinuity*
  - Tom Marley, Professor, UNL Department of Mathematics
    Title: *A history of commutative algebra at Nebraska*
  - Chris Schafhauser, Assistant Professor, UNL Department of Mathematics
    Title: *Approximate finite-dimensional representations of groups*

- **Achievements of our graduates**
  - Paula Egging, Data Scientist, Bryan Health Systems
    Title: *One Mathematician's Experience of Data Science in Healthcare*
  - Jesse Moeller, Software Engineer, SpaceX
    Title: *TBA*
  - Katie Morrison, Associate Professor, University of Northern Colorado
  - Jennifer Mueller, Professor, Colorado State University
    Title: *lnverse Problems and Pulmonary Imaging*
  - Anisah Nu'Man, Assistant Professor, Spelman College
  - Josh Pollitz, NSF Postdoctoral Fellow, University of Utah
    Title: *Instilling High Expectations*
  - Karina Uhing, Assistant Professor, University of Nebraska at Omaha
    Title: *Innovations in First-Year Mathematics Courses: Using Research to Inform Practice*

- **Mathematics outside academia**
  - Amy Bouska, former managing director, Tillinghast
    Title: *Becoming the Spreadsheet Lady*
  - Josh Brown Kramer, senior data scientist, Ocuvera and Lucas Sabalka, chief data and analytics officer, Ocuvera
    Title: *Fall Prevention with AI at Ocuvera*
  - Lisa Davis, adjunct operations researcher, RAND corporation
    Title: *Oh, the places you can go!*
  - Derek DeSantis, staff scientist, Los Alamos National Laboratory
    Title: *A Glimpse of Mathematics Research at the National Labs*
  - Levi Heath, UNL postdoctoral associate and Gabe Payson, Math in the City student
    Title: *Math in the City: Comparing Neural Network and Regression Models in Predicting Lancaster County Housing Prices*

- o Brittney Keel-Mercer, research animal geneticist, USDA
  Title: *Development of online systems for monitoring behaviors of individual animals in livestock production*
- o Laura White, aerospace engineer, NASA Langley Research Center
  Title: *The Day in the Life of a NASA Mathematician*

- **The department's commitment to mathematics education**
  - o Delise Andrews, Grades 3-5 mathematics coordinator, Lincoln Public Schools
    Title: *My Mathematics Learning Journey: The Power of Sense-Making*
  - o Allan Donsig, Professor and Vice Chair, UNL Department of Mathematics
  - o Raegan Higgins, Associate Professor & Assistant Vice Provost for Faculty Success, Texas Tech University
    Title: *Reach Back and Go Forward*
  - o Michelle Homp, Associate Professor of Practice and NMSSI Director, UNL
    Title: *NebraskaMATH goes to Africa*
  - o Matt Larson, Associate Superintendent for Instruction, Lincoln Public Schools and former President, National Council of Teachers of Mathematics
    Title: *Serving the Needs of K-12 Mathematics Teachers in the Post-Covid Era*
  - o Kristin Pfabe, Professor and Chair, Mathematics and Computer Science Department, Nebraska Wesleyan University
    Title: *The Transformative Experience of Teaching Math in Prison*
  - o Katie Soto, Professional Development Specialist, Educational Service Unit 9
    Title: *From Student to Educator: A Mathematical Journey*