

2017 Southern Mensurationists Conference
Hotel Indigo, Athens, Georgia
October 22- 25, 2017

Agenda

Sunday, October 22

6:30pm **Reception at the Hotel Indigo**
500 College Ave, Athens, GA 30601
Located in the Hospitality Suites Billiard and Piano
Rooms PH-02 & PH-01; Penthouse-level in elevator

Monday, October 23

7:00 **Breakfast Buffet (provided)**
Rialto Club Lounge (downstairs from main lobby; C-level in elevator; make a right)
Registration (table in Rialto Lounge)

8:00 **Welcome and group introductions**

8:30 **Keynote Speaker - Michael Clutter, FIA**
Inventory and modeling challenges and opportunities.

9:30 **Session I: Growth and Yield Modeling**

- **Ergin Cankaya and Philip J. Radtke. "Seeking a better way to calibrate FVS growth and yield predictions in Virginia". Virginia Tech (graduate student).**
- **Derrick Gallagher and Cristian Montes. "A simultaneous difference equation growth and yield model for the west gulf of the United States". University of Georgia (graduate student)**
- **Spencer Peay, Bronson Bullock, Cristian Montes and Michael Kane. "Growth and Yield Model Comparisons for loblolly pine in the Piedmont of the Southeastern United States". University of Georgia (graduate student).**

10:30 **Morning Coffee Break & Snacks**
Rialto Club Lounge (downstairs from main lobby; C-level in elevator; make a right)

11:00 Session II: Growth and Yield Modeling and Evaluation

- Shuaichao Sun, Quang V. Cao and Tianjin Cao. “Characterizing Diameter Distributions for Pine-oak Mixed Forests in China”. Northwest A&F University, China (graduate student).
- Mingliang Wang and Cristian Montes. “Evaluating PMRC 1996 Basal Area Thinning Model with New Post-Thin Measurements for Loblolly Pine.” University of Georgia (professional).
- Quang Cao. “Modeling Diameter Distributions from Stand Tables with Kernel Density Estimation”. Louisiana State University (professional)

12:00 Lunch (provided)

Rialto Club Lounge (downstairs from main lobby; C-level in elevator; make a right)

1:30 Session III: Growth and Yield Modeling using Spatial Data

- Stephen Kinane and Cristian Montes. “Long term fertilization response from loblolly pine experiments in Georgia, presented in a spatially explicit context”. University of Georgia (graduate student)
- Hector Restrepo, Bronson Bullock and Cristian Montes. “Stochastic Loblolly Pine Yield in the Southeastern United States: Spatial Monte Carlo 3PG Model”. University of Georgia (graduate student).
- Cristian Montes, Derrick Gallagher and Stephen Kinane. “Assimilating spatial data in forest inventory with non-linear filters and state space models”. University of Georgia (professional).

2:30 Afternoon Coffee Break & Snacks

Rialto Club Lounge (downstairs from main lobby; C-level in elevator; make a right)

3:00 Meet a Graduate Student – Professionals at SOMENS are asked to find a graduate student they don't know and spend 15 minutes introducing themselves and their company/work/university. We'll do this twice.

We have 16 graduate students in attendance at the meeting!

3:30 Session IV: Taper and Product Modeling

- John Paul McTague and Henrique Scolforo. “Parsimony, compatibility and smoothing functions for tree taper and volume”. Rayonier – North Carolina State University (professional).
- Mauricio Zapata. “Bayesian SUR approach to modeling additivity in biomass equations of Slash Pine”. University of Georgia (graduate student).
- Thomas Lynch. “Estimating tree content components using predicted total and ratios”. Oklahoma State University (professional).

4:30 Final remarks for the day and details on dinner plans.

6:00 Dinner Downtown (provided)
Short walking distance from the Hotel Indigo
Presentation of the SOMENS 2017 Achievement Award

Tuesday, October 24

7:30 Breakfast Buffet (provided)
Rialto Club Lounge (downstairs from main lobby; C-level in elevator; make a right)
Registration (table in Rialto Lounge)

8:45 Welcome and Remarks

9:00 Session V: G&Y and Genetics

- **Geronimo Quinonez-Barraza, Dehai Zhao and Hector M De Los Santos-Posadas. “Diameter growth model with neighborhood effects for natural mixed –species stands in Mexico”. INIFAP (professional).**
- **Melissa Shockey, Bronson Bullock and Cristian Montes. “Establishing a benchmark for planted loblolly pine”. University of Georgia (graduate student).**
- **Trevor Walker, Steven McKeand, Ben Smith, Bronson Bullock and Fikret Isik. “Investigating Genetic Variation in Self-Thinning of Loblolly Pine Planted on a Very Infertile Dry Site in the Sandhills of North Carolina”. North Carolina State University (graduate student).**
- **Mike Strub. “Fitting a Stand Level Mortality Model – Least Squares or Maximum Likelihood?” Weyerhaeuser Retired (professional)**

10:30 Morning Coffee Break & Snacks
Rialto Club Lounge (downstairs from main lobby; C-level in elevator; make a right)

11:00 Session VI: Forest Inventory and AI

- **Robert Schriever, John Sessions and Bogdan Strimbu. “Extraction of juniper crowns using convolutional neural network based object detection”. Oregon State University (graduate student).**
- **Bonifatius Maturbong, Michale Wing and Bogdan Strimbu. “Sensitivity of Forest Structure and Biomass Estimation to Data Processing Algorithms”. Oregon State University (graduate student).**
- **Lewis Jordan and Finto Antony. “Monotonic Neural Network Tree Taper Models with Constraints”. Equifax (professional)**
- **Bogdan Strimbu, Alexandru Amarioarei, John Paul McTague and Mihaela M. Paun. “A posterior bias correction of three models used for environmental reporting”. Oregon State University (professional).**

- 12:30 Lunch (provided)
Rialto Club Lounge (downstairs from main lobby; C-level in elevator; make a right)
- 1:30 Session VII: Open discussion on current and future southeastern forestry issues in modeling and inventory.
- 3:00 Business Meeting
Presentation of the **SOMENS 2017 Mike Strub Award**
Award for best **SOMENS 2017 Graduate Student Presentation Award**
Award for best **SOMENS 2017 Professional Presentation Award**
Host for **SOMENS 2018**
Budget
Other business
- 4:00 Closing Remarks and logistics for field trip on Wednesday

Wednesday, October 25

8:00am Vans depart from the Hotel Indigo for the field trip

Tour Stop I: PINEMAP – Tier III Site

Pine Integrated Network: Education, Mitigation, and Adaptation project (PINEMAP)

<http://www.pinemap.org>

Tier III (Throughfall Exclusion and Fertilization Experiment)

Loblolly pine, 30% precipitation reduction, fert for
2x2 Factorial with Fert and Throughfall exclusion

Tour Stop II: SAGS Culture x Density x Thinning Study

Loblolly pine, planting densities: 300, 600, 900, 1200, 1500, 1800 TPA

Intensive and Operational silviculture applied (site prep, herb, and fert)

Thinned at age 12 to current density of 300 TPA planting density (600, 900, 1200)

Lunch in Greensboro Georgia (included)

Tour Stop III: Mid-Rotation Treatment Study

Loblolly pine, first thin to 50, 70, and 90 sq ft/ac

Non-thinned, Control (Thin only), Thin + Herb, Thin + Fert, Thin + Herb x Fert

4:00pm Return to Hotel Indigo

We will not be late for those planning to take the 4:30pm Groome transportation shuttle to the ATL airport from the Hotel Indigo (you must select this pickup location online!).