



# RCN-SEES: Predictive Modeling Network for Sustainable Human-Building Ecosystems (SHBE)

**Workshop Theme:** Human Behavior & Building Energy Model Integration and validation (Theme V)

**Date:** April 2-3, 2015

**Venue:** Lawrence Berkeley National Laboratories, Berkeley, California

**Location:** Building 90

## Agenda

Thursday, April 2, 2015	
8:00 am – 9:00 am	Registration and Breakfast (Room 3122)
9:00 am – 9:30 am	Welcome – Yong X. Tao, University of North Texas, Denton, TX, USA (Room 3122) Overview - Khee Poh Lam, Carnegie Mellon University, Pittsburgh, PA, USA
9:30 am – 9:50 am	Wei Yan, Texas A&M University, College Station, TX, USA (Room 3122)
9:50 am – 10:10 am	Andrew Cross, University of Las Vegas, Las Vegas, NV, USA (Room 3122)
10:10 am – 10:30 am	Bing Dong, University of Texas, San Antonio, TX, USA (Room 3122)
10:30 am – 10:40 am	<b>Coffee Break</b>
10:40 am – 11:00 am	Mona Azarbayjani, University of North Carolina, Charlotte, NC, USA (Room 3122)
11:00 am – 11:20 am	Boris Kingma, Maastricht University, Netherlands (Room 3122)
11:20 am – 11:40 am	Vinu Subashini Rajus, Simon Fraser University, British Columbia, CA (Room 3122)
11:40 am – 12:00 pm	Sean Hsieh, University of Las Vegas, Las Vegas, NV, USA (Room 3122)
12:00 pm – 12:20 pm	Chenlu Zhang, Carnegie Mellon University, Pittsburgh, PA, USA (Room 3122)
12:20 pm – 12:40 pm	Tianzhen Hong, Lawrence Berkeley National Laboratory, Berkeley, CA, USA (Room 3122)
12:40 pm – 1:40 pm	<b>Lunch</b>
1:40 pm – 2:00 pm	Yong X. Tao, University of North Texas, Denton, TX, USA (Room 3122)
2:00 pm – 2:20 pm	Tracey Rizzuto, Louisiana State University, Baton Rouge, LA, USA (Room 3122)
2:20 pm – 2:40 pm	Julia K. Day, Kansas State University, Manhattan, KS, USA (Room 3122)
2:40 pm – 3:00 pm	Jing Ge, Cornell University, Ithaca, NY, USA (Room 3122)
3:00 pm – 3:30 pm	<b>Coffee break</b>
3:30 pm – 5:00 pm	Breakout session (Room 3122 & 4133)
6:00 pm – 8:00 pm	Dinner

Friday, April 3, 2015	
8:00 am – 9:00 am	Continental Breakfast (Room 4133)
9:00 am – 10:00 am	Round Table Discussion (Room 4133)
10:00 am – 10:15 am	Coffee Break
10:15 am – 11:45 am	Summary and conclusion (Room 4133)
11:45 am – 12:45 pm	Lunch
12:45 pm – 2:30 pm	Steering Committee Meeting (Room 4133) (optional but open to non-committee attendees)

No.	Abstract Title	Author	University
1.	BIM-based Multi-Objective Optimization for Sustainable Building Design	Wei Yan	Texas A&M University, College Station, TX, USA
2.	Lessons Learned from the Application of Data-Driven Models to Residential Building Modeling	Andrew Cross	University of Nevada, Las Vegas, NV, USA
3.	A New Approach to Validate and Standardize Occupancy Presence Modeling and Prediction in Residential Buildings	Bing Dong	University of Texas, San Antonio, TX, USA
4.	Advancing Occupant Centered Performance Simulation Metrics: Linking Commercial Environmental Quality to Health, Behavior and Productivity	M.Azarbayjani, D.Brentrup, R.Cox	University of North Carolina, Charlotte, NC, USA
5.	Female Thermal Preference: A Biophysical Analysis of Metabolism and Tissue Insulation	Boris Kingma, Wouter van Marken Lichtenbelt	Maastricht University, Netherlands
6.	Lightweight look-ahead Options: An Eco-Dialect Between the Buildings; its Inhabitants and Designers	Vinu Subashini Rajus, Robert Woodbury	Simon Fraser University, British Columbia, Canada
7.	Intelligent Agent Demand and Response System for Desert Southwest Residential Homes – Implication toward Automated Intelligent Summer Peak Energy Shifting Strategy	Sean Hsieh, Joon Lee, Andrew Cross, Robert Boehm	University of Nevada, Las Vegas, NV, USA
8.	Behavior Oriented Metrics for Plug Load Energy Savings in Office Environment	Chenlu Zhang	Carnegie Mellon University, Pittsburgh, PA, USA
9.	A behavior modeling tool for co-simulation	Tianzhen Hong	Lawrence Berkeley National Laboratories, Berkeley, CA, USA
10.	Overview of a Data Structure for Sustainable Human-Building Ecosystems	Yong X.Tao	University of North Texas, Denton, TX, USA
11.	Behavior Measurement in Immersive Virtual Environment (IVE): Striving for Prediction and Accuracy	Tracey Rizzuto	Louisiana State University, Baton Rouge, LA, USA
12.	Barriers to high-performance behaviors in high-performance buildings: a case study	Julia K. Day	Kansas State University, Manhattan, KS USA
13.	Time of Use (TOU) pricing and its impact on residential peak and demand in Jiangsu Province, China	Jing Ge	Cornell University, Ithaca, NY, USA