

MINUTES

WHIP Center Mid-Annual Meeting-in person in Lubbock, TX

Thursday, November 9 -10, 2022

(All times are Chicago/Central times)

November 9

6:30 – 9:00 pm Networking dinner hosted by National Wind Institute, Texas Tech

November 10

Present: In-person and (remote was made available as contingency due to Hurricane Nicole)

IAB & Universities – Berkshire Hathaway: Tim Doggett; ***GAF***: Erica Sherman; ***NIST***: (Marc Levitan), Tanya Brown-Giammanco and James LaDue ; ***State Farm Insurance***: (Eric Haefli) ; Verisk: Karthik Ramanatham and (Tim Johnson); ***Florida Institute of Technology***: (Nezamoddin Kachouie, Jean-Paul Pinelli, and Emese Sziklay); ***Florida International University***: (Fahim Ahmed), Arindam Gan Chowdhury, (Amal Elawady), (Haitham Ibrahim), Seung Jae Lee, Ioannis Zisis; ***Texas Tech University***: Marie Hanza, Kishor Mehta, John Schroeder, Doug Smith, Chris Summerfield, James Yang, Delong Zuo.

NSF – (Crystal Leach and Denis Gray)

Guests – ***Esdec Solar Group***: Yann Schwarz; ***GradientWind, Ottawa***: Un Yong Jeong

- 8:00 am: Self introduction, Preamble, and State of WHIP (Mehta) (ppt. attached)
- 8:30 am: Comments by Dr. Crystal Leach, NSF Program Director (ppt.attached)
- 9:00 am: Elawady/Pinelli (FIU/FIT) *Empirical vulnerability model to assess impact of windborne tree debris on lowrise construction*; Mentors: Eric Haefli, Tanya Brown-G, Daniel Diaz, Tim Johnson
- 9:25 am: Smith (TTU) *Prediction of wind and surge damage to buildings by hurricane*; Mentors: Eric Haefli, Tim Doggett, Karthik Ramanathan, Tim Johnson, Erica Sherman, Marc Levitan
- 10:00 am: Kachouie/Pinelli (FIT) *Integration of field damage, hazard, and exposure data for potential use in risk models*; Mentors: Karthik Ramanathan, Eric Haefli, Tim Johnson
- 10:25 am: Tim Doggett (IAB Chair) *What Current and Future Research would Help Our Business* (ppt. attached)
- 10:55 am: Zuo (TTU) *Development of Fragility Curves for Tornadic Loading on Low-Rise Buildings*; Mentors: Tim Johnson, Marc Levitan, Tim Doggett
- 12:35 pm: Erica Sherman (IAB Chair-elect) *Wind Tunnel Testing of Edge Metal; Industry Perspective* (ppt. attached)
- 12:55 pm: Chowdhury/Zisis /Elawady (FIU) *Wind effects on ballasted rooftop photovoltaic systems*; Mentors: Erica Sherman, Marc Levitan
- 1:20 pm: Zisis/ Lee (FIU) *Wind-induced loads on irregular shaped buildings*; Mentors: Eric Haefli, Karthik Ramanathan, Marc Levitan
- 1:35 pm: Discussion on possible research in year 5; IAB and guests

Some of the subjects discussed were impact of climate change on wind speed map and vulnerability of infrastructure, wind loads on solar panels, tornado loads – how it differs from synoptic wind loads.

- 2:00 pm: Schedule for year 5 and Phase 2 requirements (Mehta); (see attached)
- 2:15 pm: Executive Session; items discussed included expansion of research portfolio to include building resiliency, non-building structure vulnerability, renewable energy structures, recruiting new members for Phase 2, and revising by-laws.
Future meetings: Dec. 9 to discuss research in Year 5 (if needed); January 27, 2023, for progress reports; March 30-31, 2023, Annual Meeting (tentative)
- 3:00 pm: Meeting adjourned