

December 10, 2025 Theory Working Group Call

Attendees: Bilgecan Sen, Cole Brookson, Jon Borrelli, Christian John, Lenny Smith, Ruby Krasnow, Jody Peters, Gerbrand Koren, Eric Sokol, Mike Dietze, Eli Horner, Abby Lewis, Saeed Shafiei Sabet

Agenda:

1. Poll for January to May calls: <https://www.meetingbrew.com/oznxpz>
2. [EFI2026 Conference](#) in Toronto on August 4-7. New conference website!
 - a. Abstract and Travel Support requests now open until April 15.
 - b. Working Group proposal ideas (Cole)
 - i. Working groups provide extended time (1/2 day or full day) to work on specific projects with others in the EFI community. These sessions, open to all conference participants, will take place on August 4.
 - ii. Working group/workshop proposals due Jan 23
3. Predictability of Nature synthesis - discuss challenges and opportunities in predictability.
 - a. [Community Manuscript Guidelines](#)
 - b. Figure ideas: Theory Group Meeting
 - c. Table of all the papers compiled so far.
 - d. Paper that looked at predictability metrics in aquatic ecosystems:
<https://www.sciencedirect.com/science/article/pii/S1364815219309727>
 - e. Are there comparative statistics papers?
 - i. Freya shared this error metrics paper on a previous work group call:
<https://www.sciencedirect.com/science/article/pii/S0304380023002922?via%3Dihub>
 - f. Another one about metrics/evaluations:
<https://esajournals.onlinelibrary.wiley.com/doi/pdfdirect/10.1002/ecy.3431>
 - g. How connected is the predictability metric to decision making
 - i. Think it is often missing unless thinking of it as model selection
 - h. Include in paper - metrics are only as good as the decisions they enable
 - i. Valuable to do synthesis. There will be caveats and recommendations for how to science in the future
 - j. Separate paper on best practices and recommendations on scoring
 - i. Juniper's paper evaluates metrics for evaluating probabilistic forecasts - would be good for Lenny to review and then discuss on the next call
 1. Simonis, White, and Ernest. 2021. Evaluating probabilistic ecological forecasts
<https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/ecy.3431>
 - k. Is there value in summarizing what authors say they are contributing to predictability. 2 prong approach
 - i. Summarize and synthesize
 - ii. Outline a handful of ways that doing the studies excel or fail
 - l. Bilgecan will work on developing an outline to share in January to help identify writing assignments

