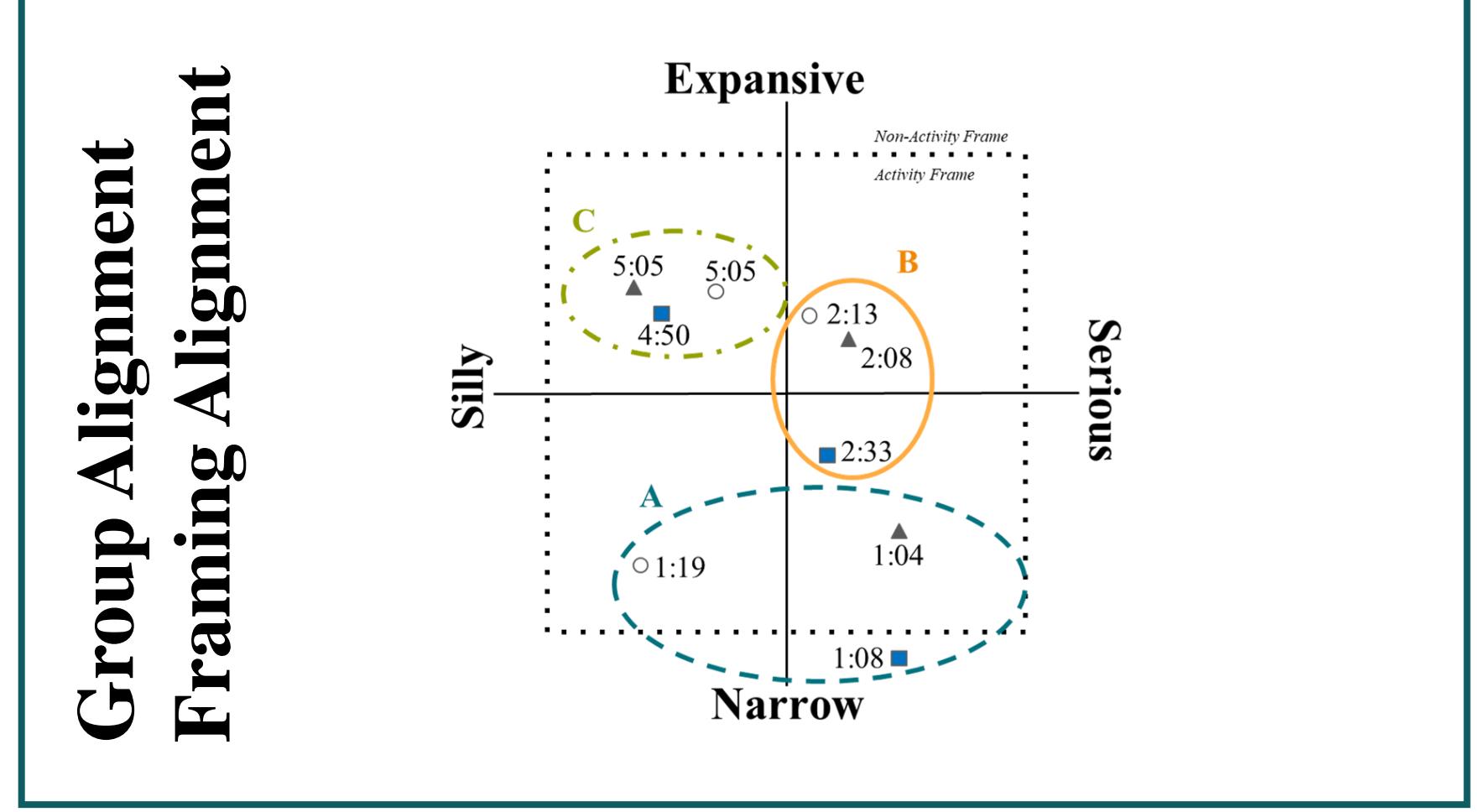
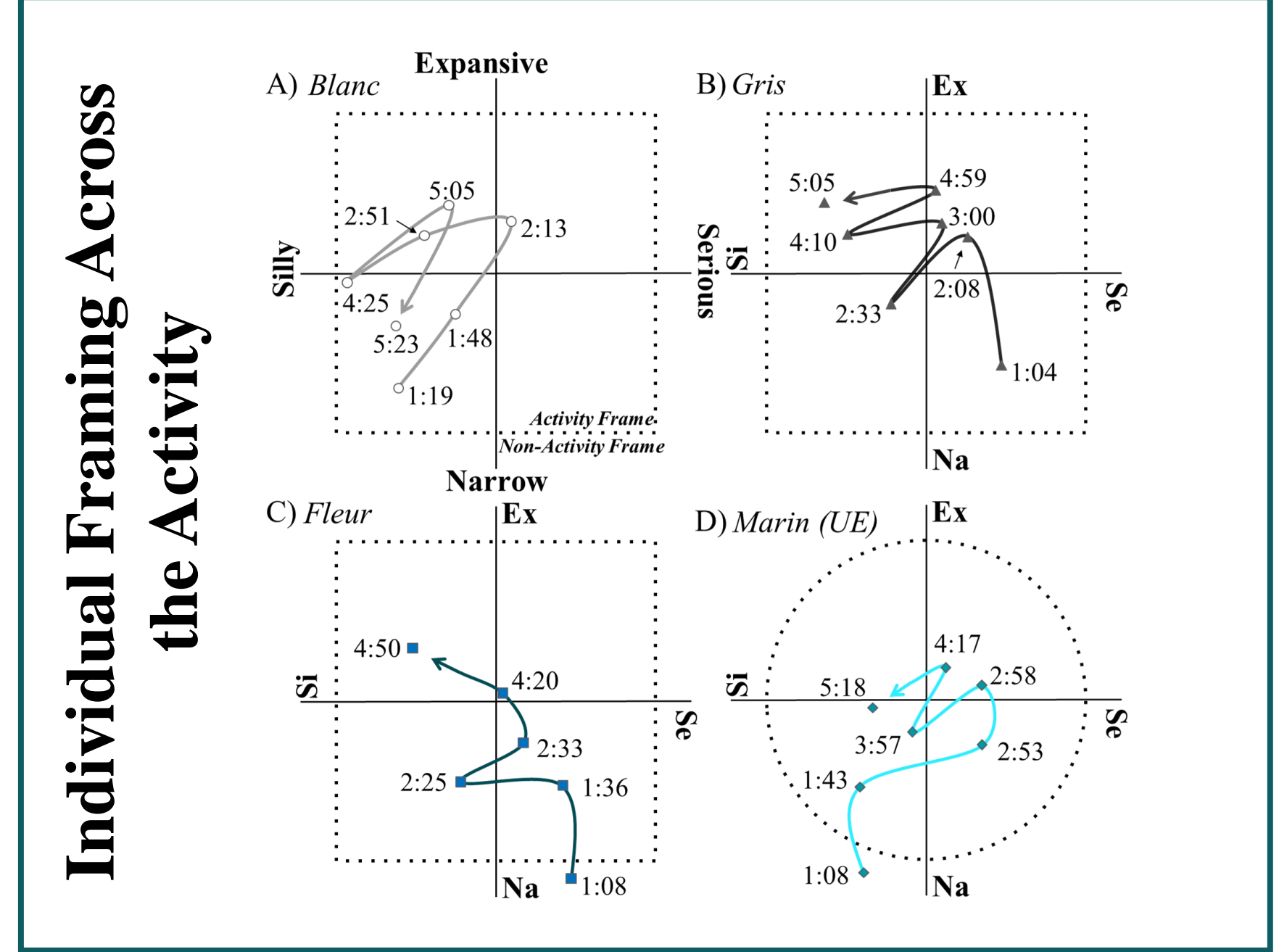
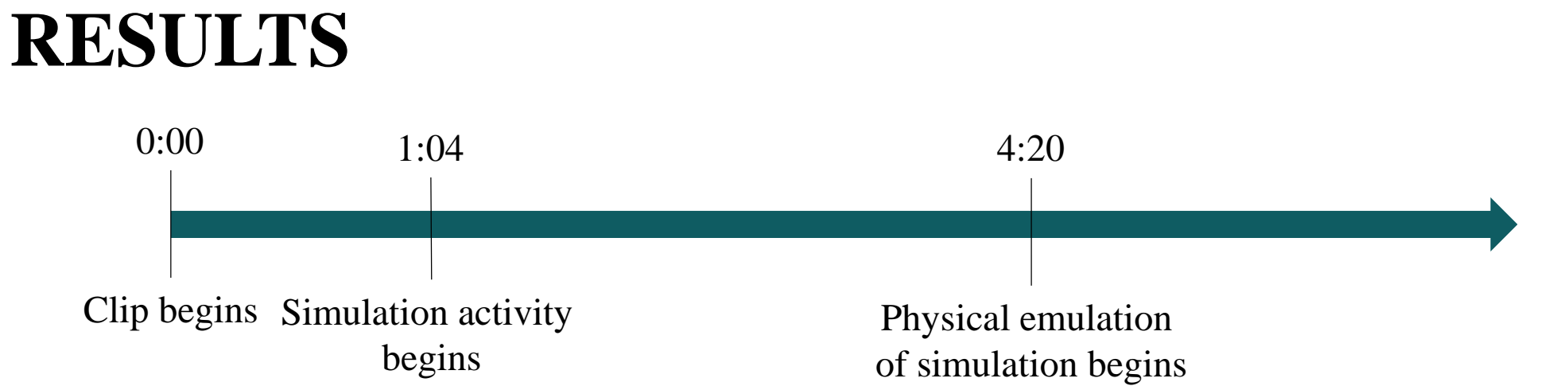


Coordinating epistemic frames in informal physics: Agency, support and technology.

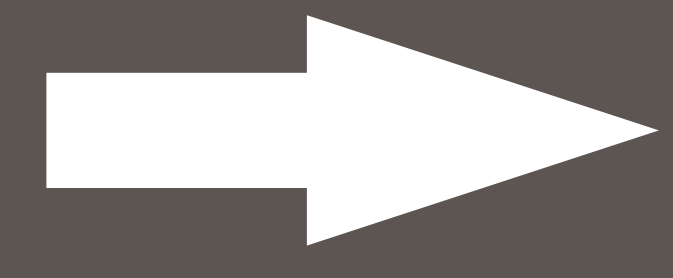
PRESENTER: Brett Fiedler

- INTRO:**
- Participants in informal physics programs bring with them **expectations informed by a vast array of experiences and backgrounds**. These expectations inform behavior that can **impact other participants**.
 - It's hard to tease apart the impact of individuals and program design (e.g. structures, pedagogy, technology) that **promote positive group experiences**.
 - Can alignment/misalignment between group participants framing reveal controllable program factors (e.g. structures, pedagogy, and technology) in student-directed informal physics learning environments?

- METHODS**
- Collect in situ audio/video + screen capture of groups (students + mentor) using interactive simulations.
 - Analyze speech and body language along a two-dimensional framing axis in alignment with conceptual connection of simulation (Expansive vs. Narrow) and playful framing (Silly vs. Serious).
 - Identify moments of **alignment or misalignment** between students frames to identify factors related to program design.



Within student-directed informal physics programs – changing alignment in framing between group participants can be used to identify and inform design principles.



Paper draft and related presentations here!

Can't chat now? Want to reach out later? E-mail me: BRETT.FIEDLER@COLORADO.EDU



Yellow Room: Level 1 John Travoltage

Equipment: iPad (with sound on), PHET simulation

Play with the PHET simulation called "John Travoltage"!

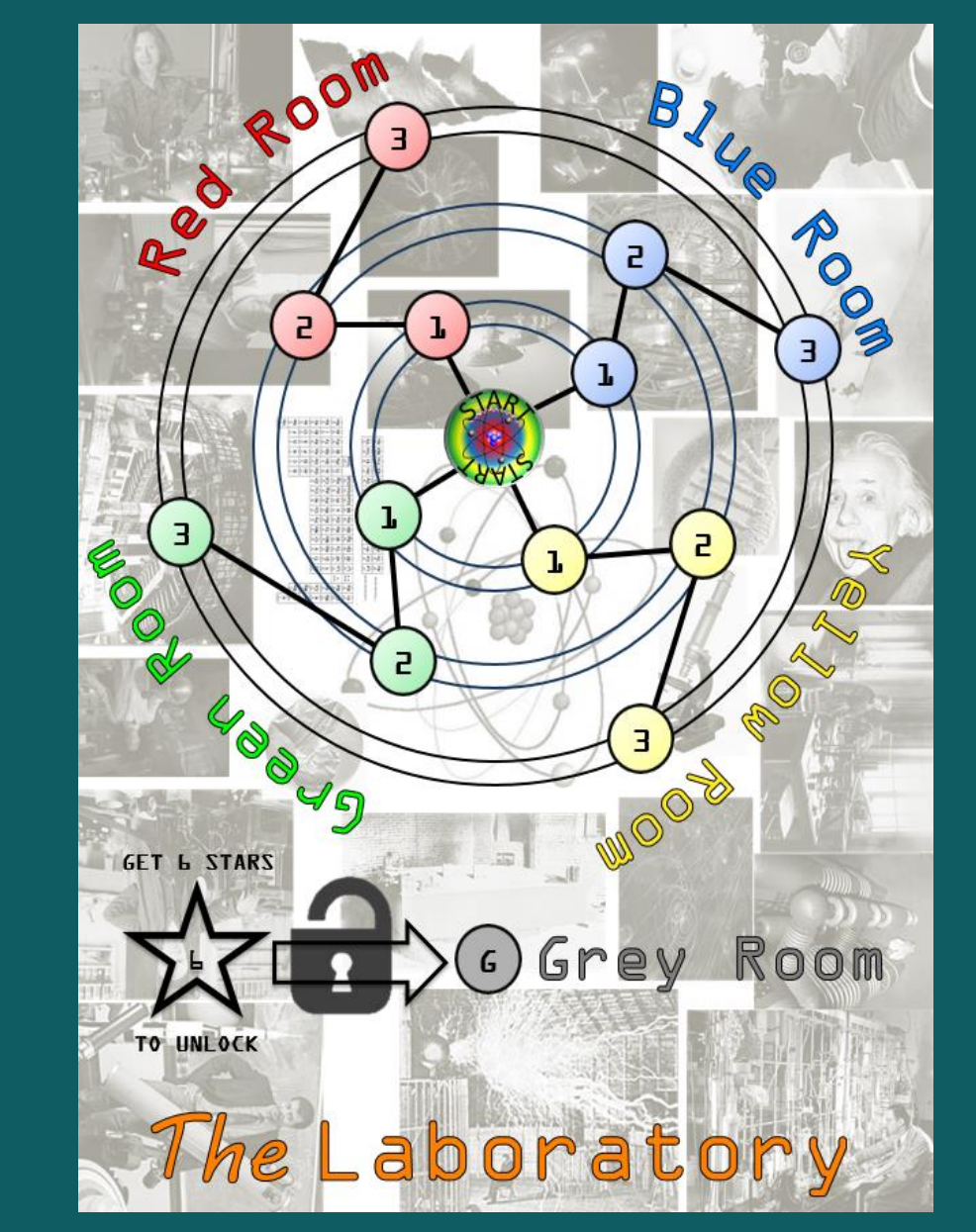
- What happens to John? Has this ever happened to you?
- What do you discover about his foot? His arm?
- How do you get the biggest shock?

What I am going to test:

What else I learned:

Computer/iPad #:

Date: _____ Science Advisor Initials: _____



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