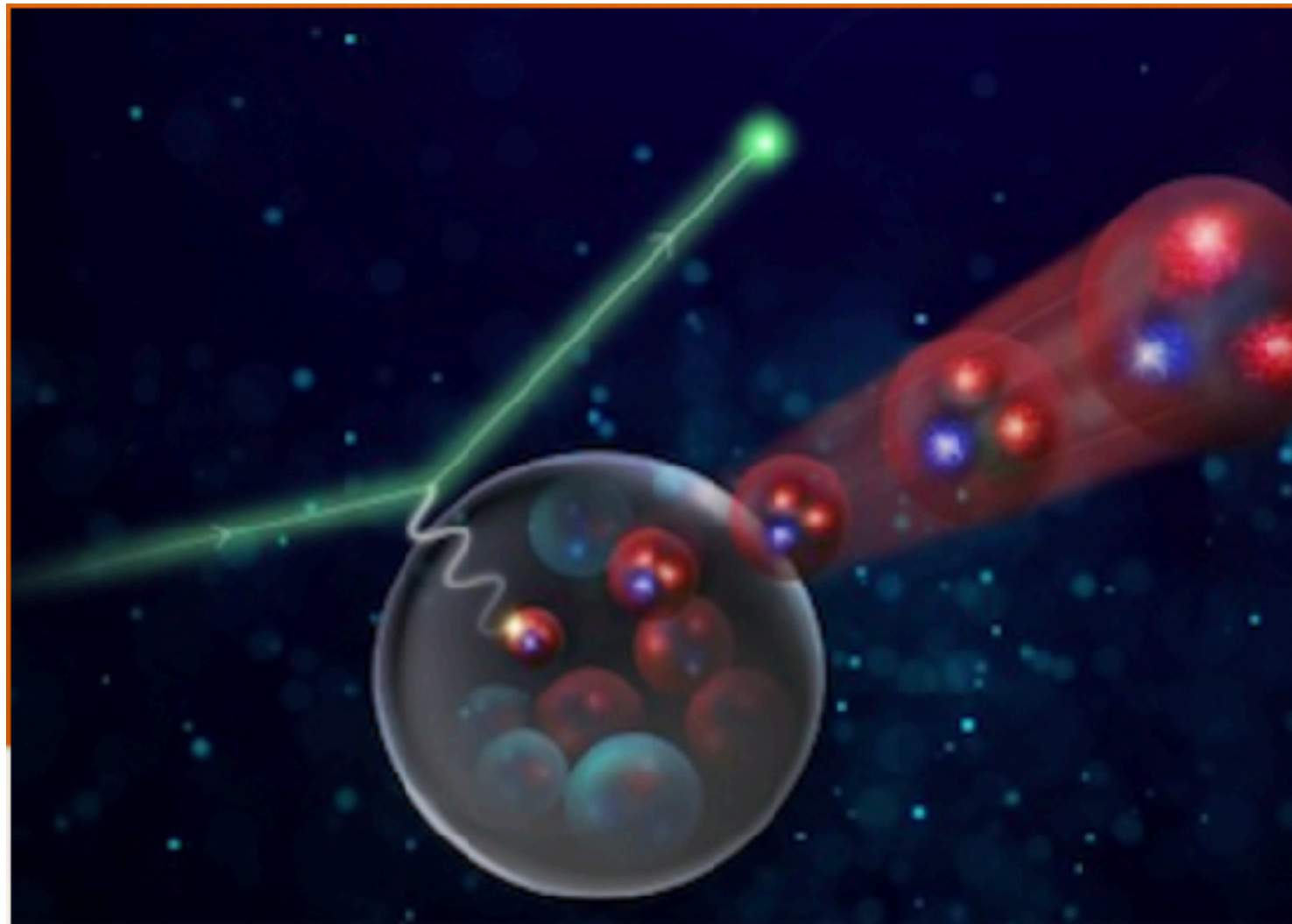


Welcome to the workshop



The Future of Color Transparency and Hadronization Studies at Jefferson Lab and Beyond

Organizing Committee:

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97 Participants

22 Talks &

6 Discussion topics

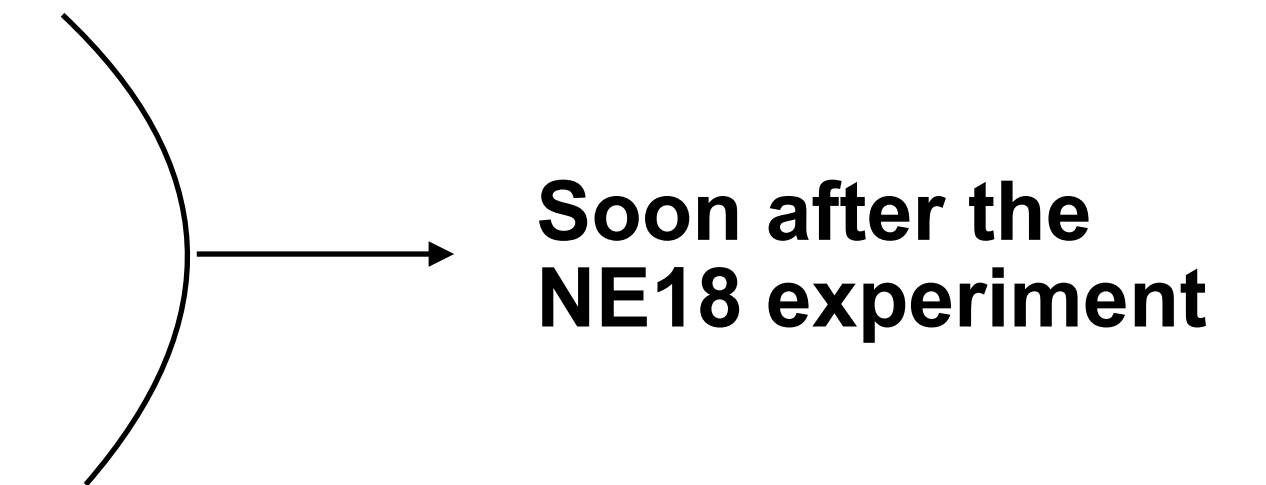
Support from: Jefferson Lab and Florida International University

There has been a long hiatus since the last workshops dedicated to color transparency and color coherence phenomenon.

Previous set of dedicated workshops were in the 1990s

Workshop on Color Coherence / Transparency Studies at CEBAF
22-24 May 1995. Newport News, VA

Workshop on Color Transparency
25-27 June 1997. Grenoble, France

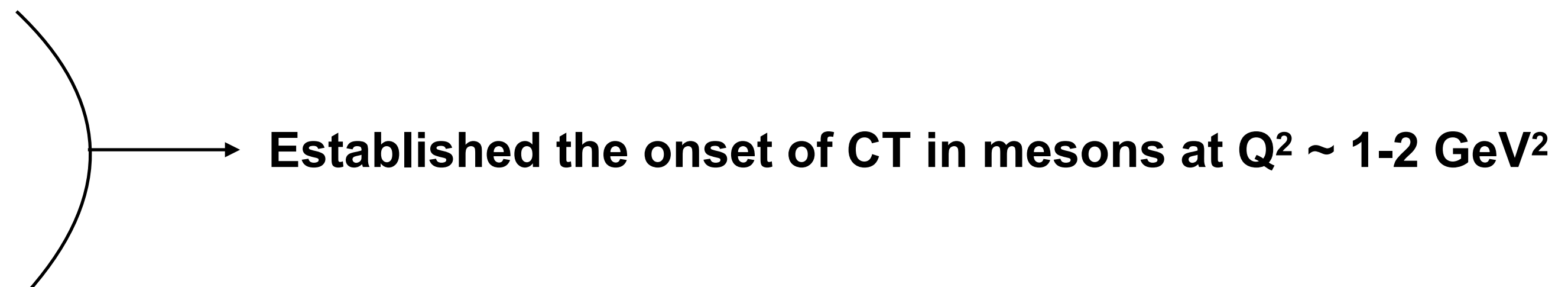


Similarly the last set of dedicated experiments were in the early 2000s

Experiment to extend (e,e'p) measurements to $Q^2 = 8.1 \text{ GeV}^2$
1999-2000 at JLab

Pion transparency experiment
2004 at JLab

ρ^0 transparency experiment
2003-2004 at JLab



The 12 GeV upgrade of JLab has opened the gates for a new era of experiments and the impetus for new theoretical calculations.

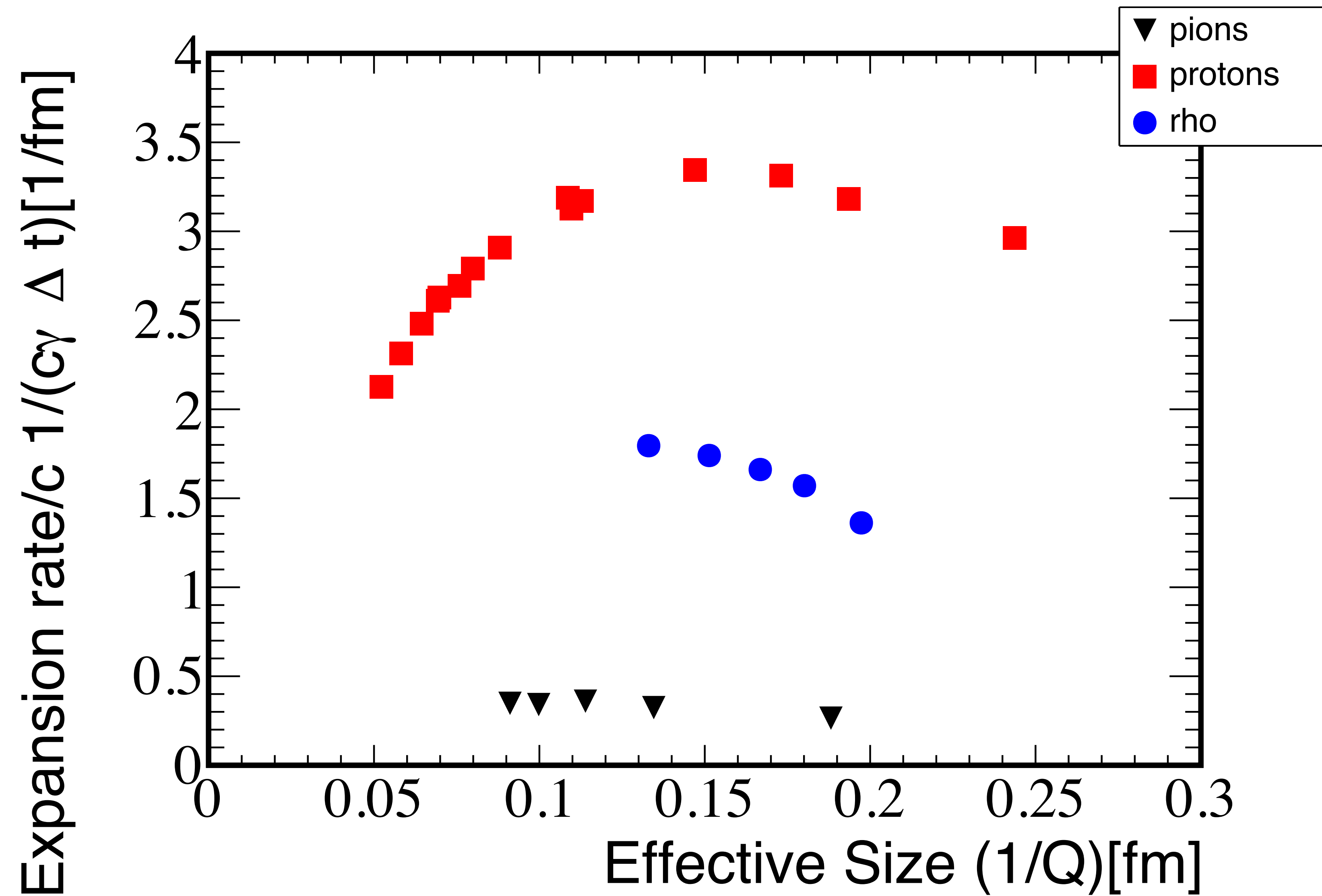
**A Hall-C commissioning experiment extended (e,e'p) measurements to $Q^2 = 14.3 \text{ GeV}^2$
2018 (results published in 2021)**

**Photon transparency experiment in Hall-D with nuclear targets
will collect data in the Fall of 2021**

**Pion transparency experiment
to be scheduled in 2022/2023**

**ρ^0 transparency experiment
to be scheduled in 2022/2023**

The first 12 GeV era CT experiment has exposed a puzzle.



This workshop is timely to help jump-start a new round of activity with fresh ideas for both theory and experiment.

The objectives of the workshop: stimulate new theoretical and experimental work towards

- understanding the apparent reaction dependence of CT.
- the differences between three-quark and quark-antiquark states.

Some ideas that will be explored are:

- connections to form factors
- virtuality dependence of FSI and connections to SRC
- holographic light-front QCD
- connections to quantum entanglement
- connections to hadronization
- chiral transparency

& new experimental ideas:

- re-scattering in $D(e,e'p)$
- dirty kinematics
- u-channel reactions
- new possibilities at JLab, J-PARC, PANDA and the future EIC

Talks are underway with **Frontiers in Physics to publish the proceeding of this workshop**



Watch out for announcements & details after the workshop

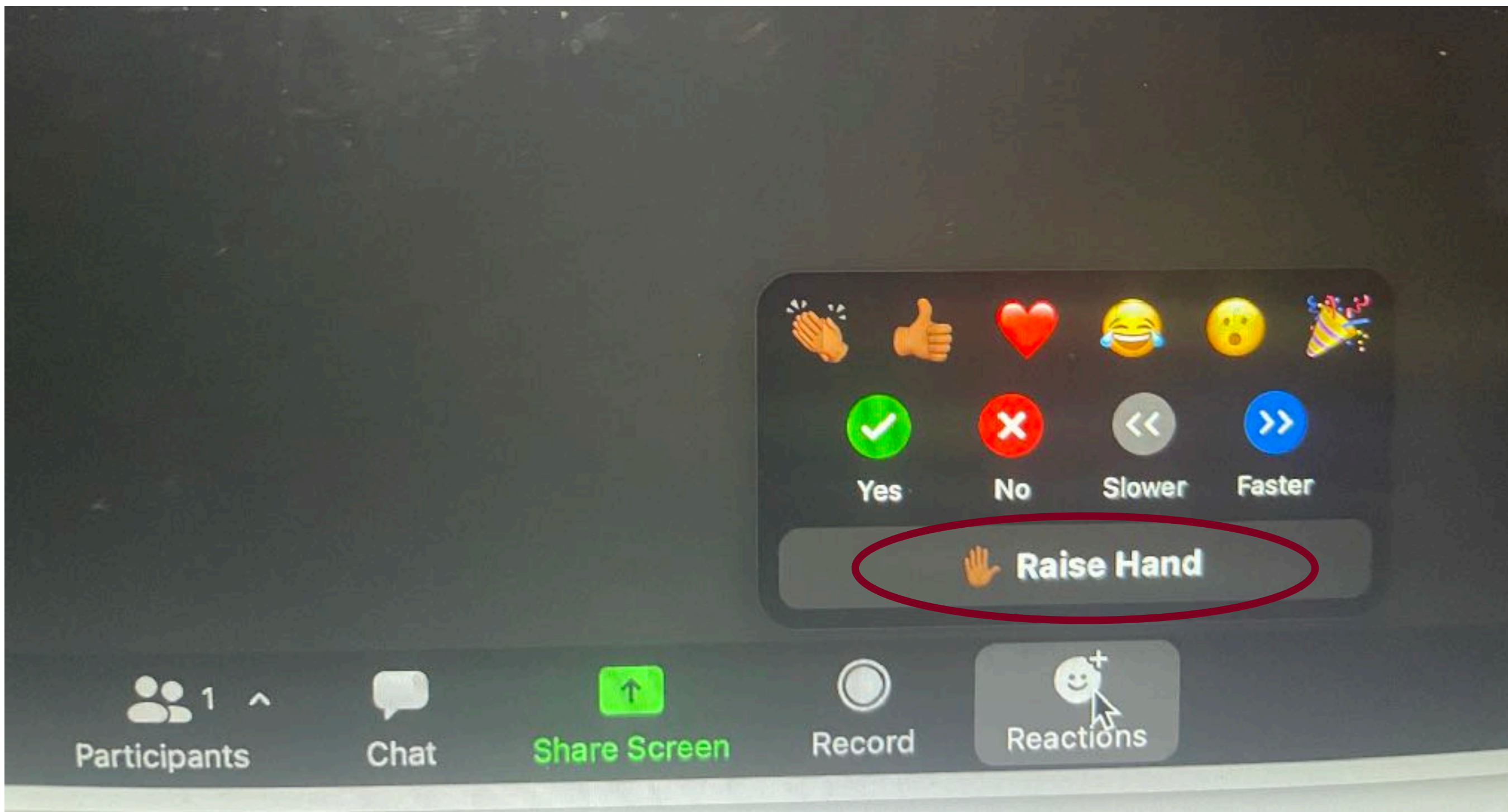
Code of Conduct

Adopted from the APS Code of Conduct:

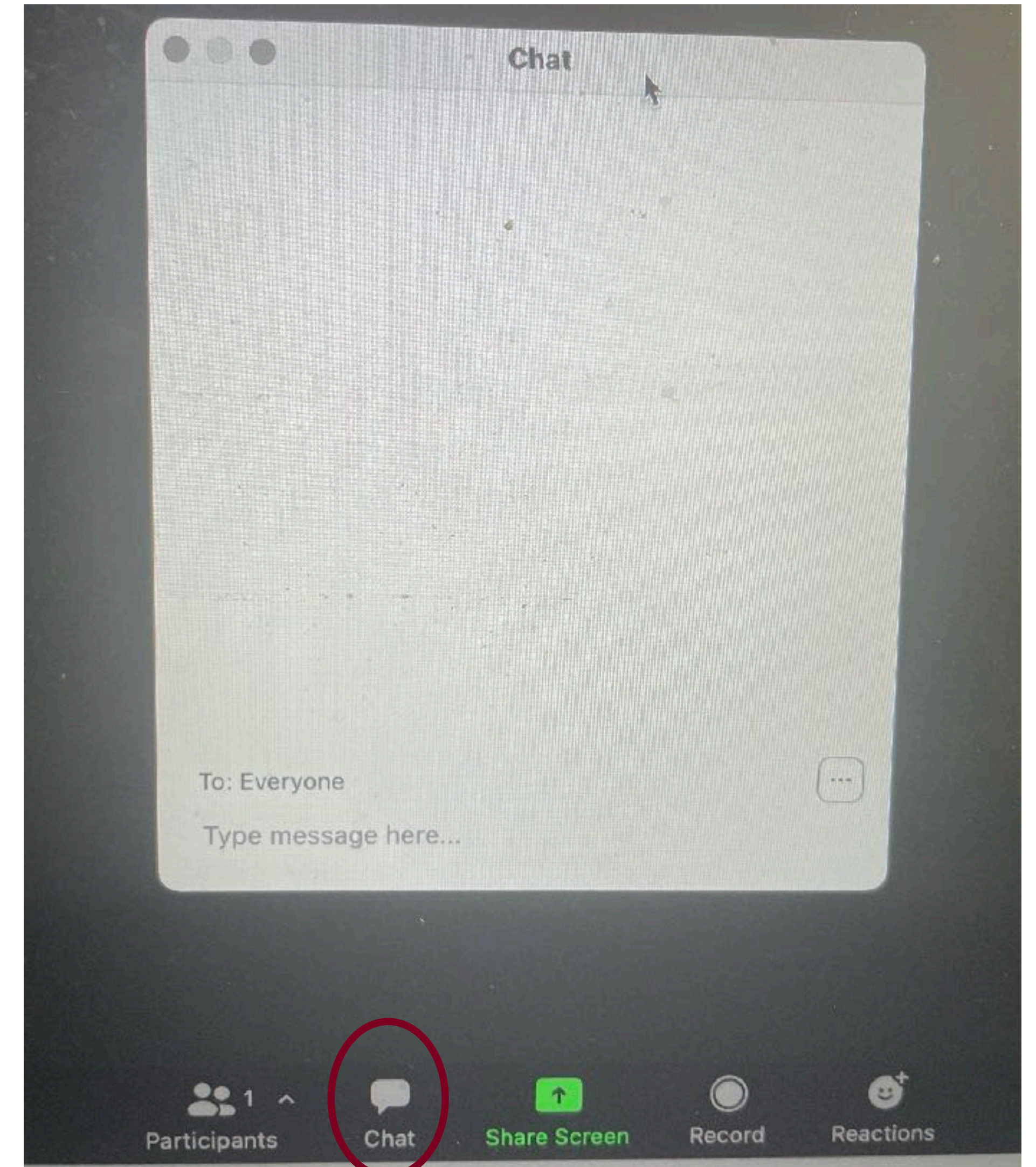
Participants will avoid any inappropriate actions or statements based on individual characteristics such as age, race, ethnicity, sexual orientation, gender identity, gender expression, marital status, nationality, political affiliation, ability status, educational background, or any other characteristic protected by law. Disruptive or harassing behavior of any kind will not be tolerated. Harassment includes but is not limited to inappropriate or intimidating behavior and language, unwelcome jokes or comments, unwanted touching or attention, offensive images, photography without permission, and stalking.

Violations of this code of conduct policy should be reported to meeting organizers. Sanctions may range from verbal warning, to ejection from the meeting, to notifying appropriate authorities. Retaliation for complaints of inappropriate conduct will not be tolerated. If a participant observes inappropriate comments or actions and personal intervention seems appropriate and safe, they should be considerate of all parties before intervening.

If you have questions during a talk



raise you hand from the “Reactions” tab



or write your question in the chat window

Let us begin

"The nature of reality is this: It is hidden, and it is hidden, and it is hidden." --- Rumi, Sufi poet