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Call for Participation in SIMIODE EXPO 2025

SIMIODE EXPO 2025, 14 - 16 February 2025, is the fifth international online conference devoted to teaching and learning differential equations through a modeling approach and broader issues. The conference is in a rich and supportive virtual platform for talks, presentations, panels, sharing, fun activities, informal break-out discussions, and on the spot collegial exchanges. EXPO 2025 is sponsored by SIMIODE – Systemic Initiative for Modeling Investigations and Opportunities with Differential Equations, a non-profit Community of Practice. See all the rich engagements and materials offered in SIMIODE at qubeshub.org/community/groups/simiode.

At qubeshub.org/community/groups/simiode/expo we offer complete information on SIMIODE EXPO 2025 as well as a complete listing of slides and videos of all previous EXPO conference activities.

We offer opportunities for talks by colleagues through our Call for Presentations and abstract submission and registration information. Registration for this rich three-day conference is FREE for students and attendees from developing countries and for all others, early-bird fee is \$65 US through 14 January 2025 and \$95 US thereafter. All attendees can invite one colleague as a FREE guest attendee. So, join us!

Our exciting keynote speakers are Cynthia Nicol, The University of British Columbia, on "Pedagogies Supporting the Well-being of the Self, Community, and Land," and the team of Feryal Alayont - Grand Valley State University; Korana Burke - University of California, Davis; Erin Griesenauer - Eckerd College; Jeremy Shaw - Oregon State University-Cascades; Rohit Thomas - University of California, Davis, on "Ethical Reasoning: An Essential Component of Mathematical Modeling."

The program includes sessions on the “how to” of using modeling to introduce and motivate the study of differential equations; sources for data and ideas for modeling; modeling in calculus and differential equations; useful technologies (e.g., WikiModel, SLOPES, and InsightMaker); student course projects and summer research; student reactions to modeling in coursework; student social Saturday night; sharing the SCUDEM Outstanding Award modeling experiences as well as other competition experiences; sample classes with rich resources for success; special topics for courses; use of available modeling sources (e.g., SIMIODE, COMAP, and CODEE); panels and discussions on topics of concern to faculty and students; meet the author, Dr. Kurt Bryan, of the SIMIODE low-cost differential equations textbook, *Differential Equations: A Toolbox for Modeling the World*; ideas on the proverbial “How do we do modeling and cover ‘required’ materials?” as well as other practical issues; and much more.

There are two FREE workshops: (**MINDE** - Model INstructors in Differential Equations) for learning how to use modeling in teaching differential equations (two 2-hour sessions) and (**DEMARC** - Differential Equations Model And Resource Creators) for writers who wish to develop Modeling Scenarios to be peer-reviewed and published in SIMIODE (one 2-hour session with follow-up session in two weeks).

We plan small group gatherings to meet new friends and exchange interests and contact information as well as more extended break-out sessions. All formal sessions will be recorded for total conference presentations and later reference as we have done in the past.

Contact Director@simiode.org about your ideas and experiences for session ideas related to teaching differential equations through modeling.