A Fields Sponsored Symposium

CODING, COMPUTATIONAL MODELLING, & EQUITY IN MATHEMATICS EDUCATION

Also including a **PD Day for teachers!**April 26

Face-to-Face, Brock University April 27-29, 2023



Recently, computational thinking [CT] – in the form of coding and computational modeling – has received increased emphasis via practice and public policy in mathematics education settings, including being formally integrated in mathematics curricula (e.g., in Ontario, Finland, Sweden, Australia, France, ...) and supported by international organizations (e.g., PISA's decision to assess mathematical literacy as involving elements of CT starting in 2022).

3 Working
Groups: led by [

Early Years / Elementary

University of California Berkeley, USA

University of Calgary, Canada

led by Dr Krista Francis & Dr Sandy Youmans

Secondary / University

led by Dr France Caron, Dr Steven Floyd, & Dr Miroslav Lovric

Equity, Diversity, & Inclusivity

led by Dr Annie Savard, Dr Ricardo Scucuglia, & Dr Diane Tepylo

Keynote Speakers:

Dr. Andrea diSessa

Dr. Gideon Christian

emerging issues such as:the meaning of CT and its relations with mathematics

- how coding and computational modelling can be practically
- and meaningfully integrated in mathematics classrooms across education levels (elementary, secondary, university)

In this evolving context, the event seeks to provide a forum for sharing perspectives and experiences, and discussing

• equity, including how to attain equitable participation and learner outcomes



2 Discussion Panels:

Practical Challenges/Opportunities

Professor Dame Celia Hoyles (Chair), Dr George Gadanidis, Dr Oh Nam Kwon, Dr Simon Modeste, & Dr Elena Prieto-Rodriguez

Interactions between CT and MT

Dr Nathalie Sinclair (Chair), Dr Paul Drijvers, Dr Eirini Geraniou, & Dr Elise Lockwood

Poster or Project Display Session

Chairs of the Organizing Committees:

Steven Khan, Laura Broley, Chantal Buteau, Dorothy Levay (Brock), Immaculate Namukasa, Marja Bertrand (Western)





