

one day post-conference workshop for
science educators & researchers in education

Designing Modeling Activities for K-12 STEM Education

How can we support and study the development of
scientific, mathematical and engineering
modeling practices in K-12 classrooms through
the design of learning ecologies?



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1000-1530hrs

In this workshop, we will explore how the design of such learning ecologies includes making informed bets about STEM practices that can be robustly and fruitfully approximated in classrooms. These commitments are

- accompanied by conjectures about
- (a) how these practices interact to develop new knowledge,
- (b) the kinds of tasks and means of articulation that will support this hypothetical development, and
- (c) how to establish and maintain settings in which children can participate in both the production and critique of these emerging concepts and practices.



bit.ly/2YXnUjV

We will introduce participants to a few different examples of modeling activities that involve a range of modalities such as embodied, physical and computational modeling, organized around a central theme: the design of mathematical measures. We will also explore a few different phenomena and topics in physics, biology and engineering design. Participants will work in small group sessions to engage in these activities by role-playing as learners, designers and researchers, and develop their own adaptations, modifications and innovations of the activities.

no fees

limited accommodation available for
outstation candidates (at ₹300 per night)

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