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Remote Physics Learning with Desmos: Strategies for Engagement, Collaboration, and Real-time Feedback
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Replicating active learning strategies in a remote setting brings with it many challenges that require careful attention to both pedagogy and technology. In this talk, I describe our departmental efforts over the past year to foster student engagement and collaboration, but to also to provide real-time feedback in introductory physics courses using Desmos an online calculator and activity builder that is freely available. Specific examples of how we transformed and modified in-class learning activities for use in Desmos will be presented, including card-sorting, white-boarding, individual practice, and laboratory activities. Each of the examples presented provides a backdrop for the broader aims of (1) highlighting various capabilities of Desmos, (2) discussing pedagogical design principles, (3) and sharing both our successes and lessons learned.