

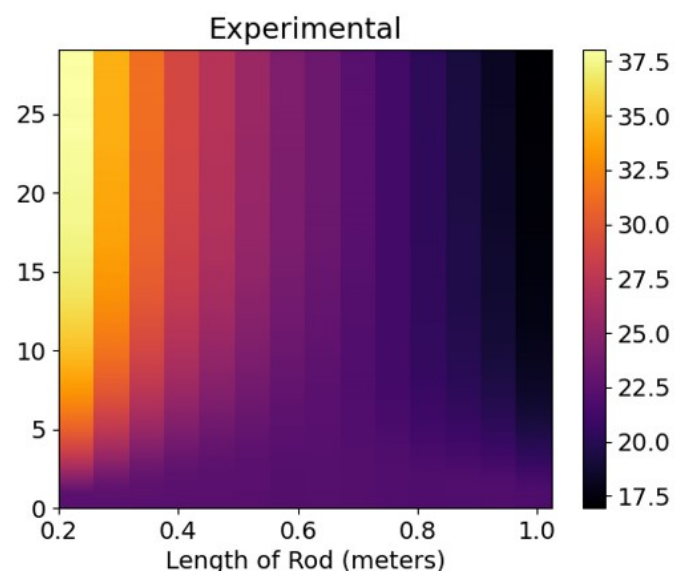
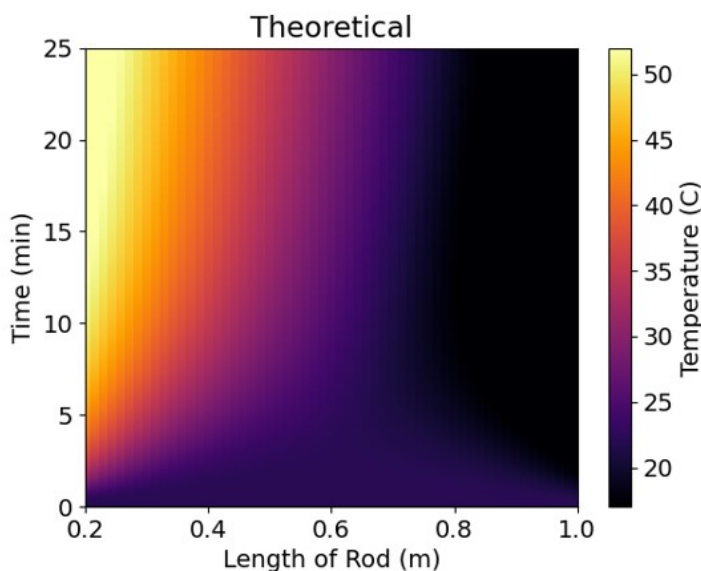
Physics Department Seminar

11 am April 26, 2024 Science Building Room 126

A comparison of experimental and theoretical heat diffusion across a copper pipe

Liam Jacob

California State University, Chico



Understanding heat transfer is critical in engineering, as high temperatures can affect electronics and volatile compounds and generally degrade the performance and lifetime of components. Many applications require a complex heat transfer analysis of objects with complex

geometries. Here, we studied the simplest case of a 1D copper pipe. The experimental data and the model show agreement in the general shape of the temperature gradient but not in the specific values. The experimental setup and the model need further improvements.