

PHYSICS AND ASTRONOMY COLLOQUIUM (In-Person)

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"How Our Brain Perceives The World and Why We Have To Be Careful Interpreting What We See"

Abstract

"It is our job as scientists to observe the world, interpret what we see, and make models to usefully predict the behaviour of a given system. In order to do this properly, we must ensure that our observations are not biased, either consciously (relatively easy), or unconsciously (not trivial). It is surprising how biased our perception of reality is, by necessity and by ancestry. There is a whole branch of psychology, cognitive thinking, that deals with this issue. Recently, psychologists have begun to consider an unusual, but in the end not surprising, source of information about how we are misled by our senses.

My goal in this talk is to make you aware of the hidden biases in our perception so that you will be able to design more effective experiments and interpret them better.

NOTE 1: This talk is particularly recommended for umdergraduate and graduate students.

NOTE 2: You should bring a small pad of paper and a pencil/pen for the interactive part of the presentation."

Wednesday, January 17th, 2024 3:30 p.m. PST BWC A104