DEPARTMENT OF MATHEMATICS

Fall 2023 Colloquium Series

Language as a Softening Liquid

Dr. Peter Overholser

Research Scientist
Schatz Energy Research Center

Legendary mathematician Alexander Grothendieck described his personal approach to solving difficult problems in the following way: "The first analogy that came to my mind is of immersing the nut in some softening liquid, and why not simply water? From time to time you rub so the liquid penetrates better, and otherwise you let time pass. The shell becomes more flexible through weeks and months – when the time is ripe, hand pressure is enough, the shell opens like a perfectly ripened avocado!"

Grothendieck's approach is often described as "building theory" around a problem, but another way to understand it is as the development of an appropriate language. In other words, a problem often becomes "trivial" once it's clearly described in the right language. I'll give sketches of this beautiful phenomenon from history and personal experience, and discuss its meaning in the context of AI and cryptography.

November 30, 2023
Thursday

4:00 PM
BSS 166

FOR MORE INFO GO TO HTTPS://MATH.HUMBOLDT.EDU/GET-INVOLVED/MATHEMATICS-COLLOQUIUM

WE CORDIALLY INVITE YOU TO THE PRE-COLLOQUIUM TEA IN BSS 312
AT 3:30 PM