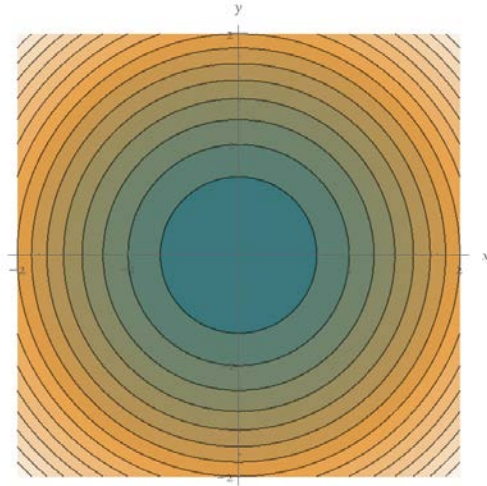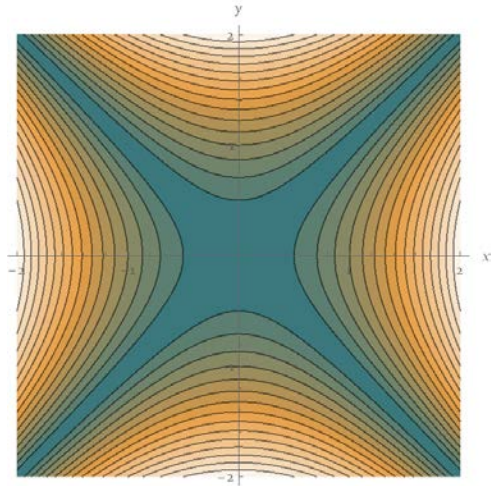# Department of Mathematics
Fall 2018 Colloquium Series

Perplex vs. Complex

Walden Freedman,
Humboldt State University

Thursday, October 11, 2018

BSS Room 204, 4 pm

Perplex numbers are a kind of alternative to complex numbers. They are numbers of the form $x + jy$, where j is not a real number, but satisfies $j^2 = 1$. Like the complex numbers $\mathbb{C}$, the perplex numbers $\mathbb{P}$ are in one-to-one correspondence with the points in the xy-plane with $x + jy$ corresponding to the point (x, y). We will see how $\mathbb{P}$ differs from $\mathbb{C}$, use Mathematica to explore some of the elementary functions on $\mathbb{P}$, and see what holomorphic functions are like in this setting. A familiarity with the complex plane and complex functions will be helpful to audience members.

Walden Freedman is a professor of mathematics at HSU. He has been at HSU since 2001. He has a BA in mathematics from UC Berkeley, an MA in mathematics from the University of Michigan, and a PhD in mathematics from UC Santa Barbara (1995). When he's not thinking about math, he enjoys playing classical guitar, reading, cooking, and hiking (but not all at the same time).

To view this poster online, go to http://www.humboldt.edu/math/news-and-events/math-colloquium

We cordially invite you to the Pre-Colloquium Tea on the third floor of the BSS
Building at 3:30 pm on Thursday