

Cal Poly Department of Mathematics

Puzzle of the Week

Jan 9 - 15, 2009

The other day I over-heard the following conversation amongst mathematicians in the hallway:

Alice: "I am insane."
Bob: "I am pure."
Charlie: "I am applied."
Dorothy: "I am sane."
Alice: "Charlie is pure."
Bob: "Dorothy is insane."
Charlie: "Bob is applied."
Dorothy: "Charlie is sane."

Let it be given that:

Pure mathematicians tell the truth about their beliefs.
Applied mathematicians lie about their beliefs.
Sane mathematicians' beliefs are correct.
Insane mathematicians' beliefs are incorrect.

Describe the four mathematicians.

Solutions should be submitted to Morgan Sherman:

*Dept. of Mathematics, Cal Poly
Email: sherman1 -AT- calpoly.edu
Office: bldg 25 room 310*

before next Friday. Those with correct and complete solutions will have their names listed in next week's email announcement. Anybody is welcome to make a submission.