Bay Area Mathematical Adventures

Richard Borcherds
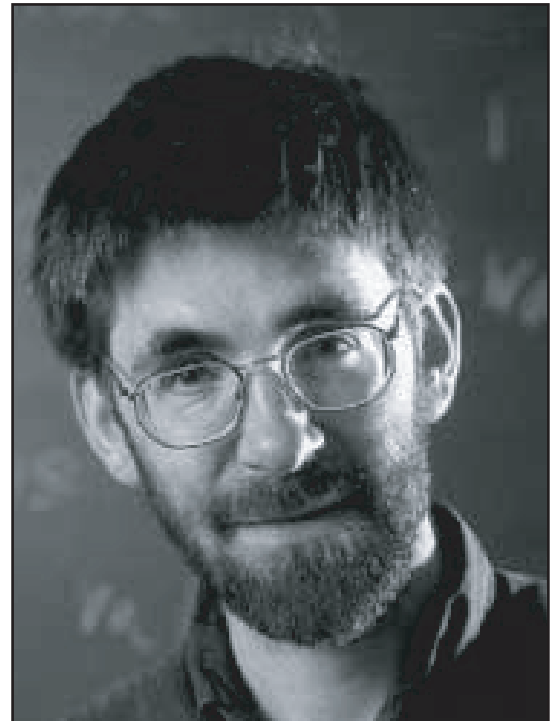## *Very Large Integers*

Santa Clara University

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Daly Science 206

7:30 pm
Wednesday, October 24

An old joke tells of two noblemen competing to see who can name the largest integer: the first nobleman picks "three", at which point the second nobleman gives up. I will discuss some strategies for winning this game, which turns out to be related to Gödel's incompleteness theorem.

Richard Borcherds was born in Cape Town and educated at King Edward's School, Birmingham, and Cambridge University, where he studied under John H. Conway. In 1998, at the 23rd International Congress of Mathematicians (ICM), he received the Fields Medal for his work regarding a purely mathematical and unimaginable object that lives in 196,883 dimensions. The Laudation delivered at the ICM read, in part: "Displaying penetrating insight, formidable technique and brilliant originality, Borcherds has used the beautiful properties of some exceptional structures to motivate new algebraic theories of great power." Borcherds himself puts it slightly differently: " It's a bit like maybe trying to solve a crossword puzzle, except that instead of spending ten minutes on it, you're spending ten years on it". Dr. Borcherds is currently a Professor of Mathematics at UC Berkeley.

* See back for map and directions.