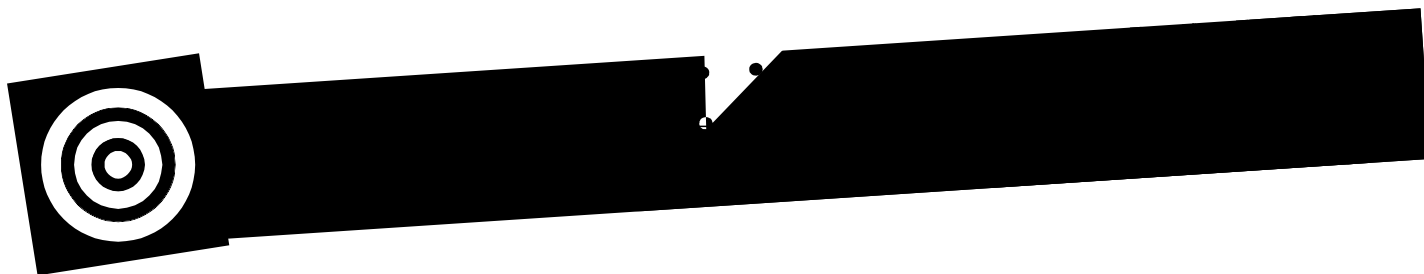


Mathematics News

University of Idaho



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An Interview with Professor Bill Royalty

When did you first become interested in Mathematics?

In high school I was struck by the beauty of the mathematics in physics. The formulae all seemed so powerful and straightforward - making complicated ideas clear and sim-

Were your parents or siblings mathematical?

My brother is a psychology professor who seems to enjoy the statistics involved in the design and analysis of experiments. He seems scandalized whenever I ask if the data on rodents in mazes is ever tweaked or massaged. Do you think he's playing with my head?

Where did you go to high school and college?

Where did you go to graduate school and why?

I went to high school in a small rural town in Iowa and college at the University of Iowa. I was undecided between Iowa and the University of North Carolina. Both math departments had a lot of algebra courses, which seemed particularly attractive to me at the time but it was the 60's and the Southeast somehow had less luster. Jesse Helms, then as now, had been so dead for some time that his passing away seemed imminent. Iowa was already a very hospitable place and I knew more about the department and had some friends there. I had some money saved from my stint in the Air Force and didn't need to rely on a TA for a while whereas Chapel Hill insisted I teach from day one. As it turned out so did Iowa.

How did you decide to specialize in analysis?

Two things actually - the intellectual pleasure of a course from Halmo's textbook on measure theory was one. Secondly, the contact I was fortunate to have

with Professor Sterling Berberian. He was idiosyncratic on a heroic scale and it seemed the most natural thing in the world to be in awe of him - a practice he did nothing to discourage. Questions in class were rarely sought and never tolerated but his lectures were sheer perfection. He was every bit as hard on himself as on others. For example, at that time he had set himself the task of writing a measure theory textbook that would challenge the one of Professor Halmos - unfortunately a contest that could have but one possible outcome.

Can you describe the research that you do?

The application of functional and topological methods to singular boundary-value problems in differential equations. My thesis was on fixed-points in Banach spaces so I was fortunate that this department was so strong in differential equations. Some of these problems are rooted in chemistry and physics so I guess I'm back where I started.

Has there been a particular teacher or professor who has motivated you or that you have especially enjoyed?

Mr VanVranken, my high school science teacher, was kind, patient and dead certain that absolutely everyone would eventually come around to appreciating chemistry and physics. Some students were simply worn down by his relentless good will and took to studying

Eugene and Osa Taylor Mathematics Scholarship

This scholarship was established in 1979 by the family and friends of the first head of the department, Eugene Taylor and his wife Osa. He directed the department from the time he came to the department in 1920 until he retired in 1950. In 1981, his family donated many of his personal mathematics books to the



