UCSD senior receives top national award in mathematics

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UCSD SENIOR RECEIVES TOP NATIONAL AWARD IN MATHEMATICS

Versatile undergraduate mathematician, violinist wins Schafer Prize

Mariana Campbell, a senior at the University of California, San Diego, has been selected the recipient of the Association for Women in Mathematics (AWM) Alice T. Schafer Prize for excellence in mathematics by an undergraduate woman. Campbell will receive her award at the American Mathematical Society/Mathematical Association of America (AMS/MAA) Joint Meetings in Washington, D.C., Jan. 19-22, 2000.

Campbell will present a paper in the Special Session: Research in Mathematics by Undergraduates at the January joint meetings on a project she participated in last summer at the National Science Foundation Research Experiences for Undergraduates (REU) at Mount Holyoke College in South Hadley, Mass. The paper, The Igusa local zeta function for the different reduction types of the special fiber of an elliptic curve, is being prepared for publication. She has presented talks on this research at Mathfest '99 in Providence, R.I., the UCSD Number Theory Seminar, the University of San Diego, and the Mount Holyoke Summer Research Symposium.

Campbell, the daughter of Dr. and Mrs. Bruce Campbell of San Diego, is currently working on extending the research from the REU project to another class of curves: hyperelliptic curves.

Campbell presented a talk on Complete Graphs on Surfaces of genus g and the Map Color Theorem at the Institute for Advanced Study in Princeton, N.J., and on braids to the UCSD Undergraduate Knot Theory Seminar. Her projects have included finding low degree rational approximations to the Navy's antenna data and the mathematics of card shuffling. She has taken graduate courses in number theory: analytic and algebraic number theory and Fourier analysis on finite groups and she has been a teaching assistant in calculus and a private tutor.

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