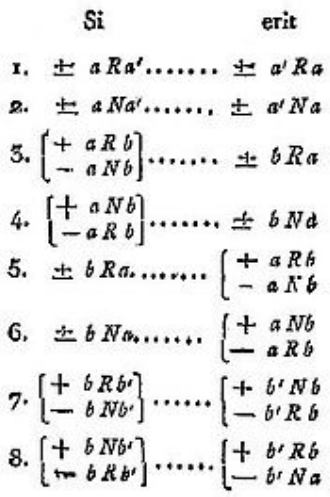
Department of Mathematics

Spring 2017 Colloquium Series



The Jewel in the Crown: Quadratic Reciprocity

Rick Luttmann,
Sonoma State University

Thursday, April 13, 2017

BSS Room 204, 4 pm

We will discuss the Law of Quadratic Reciprocity, which Gauss famously described as the Jewel in the Crown (Number Theory) on the head of the Queen of the Sciences (Mathematics). The Law arises from the question: Which possible remainders can the perfect squares have when divided by any number *m*? We will make extensive use of the relation "congruence mod *m*" on the natural numbers, and explore many interesting and useful applications of the concept.

Rick Luttmann got his PhD degree in Mathematics from the University of Arizona in 1967. He was a regular faculty member in the Math Department at Sonoma State University from 1970 to 2014. Among his numerous mathematical activities, he has helped edit the problem section of the American Mathematical Monthly for many years. He has been a volunteer math tutor at San Quentin State Prison from 2003 to 2013. He is also the author of two non-math books: "Chickens in Your Backyard" and "Ducks and Geese in Your Backyard" (Rodale Press, 1976, 1978).

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