



CLAREMONT CENTER  
for MATHEMATICAL SCIENCES

CCMS COLLOQUIUM

---

REFLECTIONS AND BRAIDS

by

**Jon McCammond**

University of California, Santa Barbara

---

**Abstract:** This talk will be an introduction to and an overview of the main properties of two large collections of infinite groups. The first is a collection of groups called Coxeter groups that are generated by mirror-like reflection symmetries. These are a natural generalization of the symmetry groups of the platonic solids and their higher-dimensional analogs. The second collection is a natural generalization of the group of ways to braid a set of strings in space. The groups in this second family are called Artin groups and they are closely related to those in the first family. The focus of the talk will be on basic intuitions and results about the groups themselves and on their close connections with various other parts of mathematics..lin

**About the speaker:** Jon McCammond is a professor of mathematics at the University of California, Santa Barbara. He received his Ph.D. in Mathematics from the University of California Berkeley in 1991 and bachelor's degrees in Mathematics, Physics and German in 1988 from Bethel College in Kansas. Before arriving in Santa Barbara in 2002, he was an assistant professor at Texas A&M University and a community college instructor at Chabot College in Hayward, California. His recent research has ranged in area from geometric group theory to low-dimensional topology to geometric combinatorics. A constant theme underlying this range of areas has been the constructive aspects of various geometrically defined constructions that he investigates through the use of colorful pictures and hand-held manipulative devices (i.e., toys). Professor McCammond has lectured widely on his research, including short courses in Canada, France and South Korea, and he has received several awards for his teaching, including the 2007 Teaching Award from the southern California-Nevada section of the MAA.

---

**Wednesday, February 15, 2012, at 4:15pm**

Freeburg Forum (Kravis Center, LC 62), Claremont McKenna College

Refreshments at 3:45 p.m. in Freeburg Forum Courtyard & wine and cheese after the talk in CMC Math Commons Room (Adams 208)

---

*The dinner will be hosted by Prof. Rena Levitt.  
Please contact Prof. Levitt if you are interested in attending the dinner*