Colloquium/Nieuwland Lecture Series

UNIVERSITY OF NOTRE DAME
Department of Mathematics

Speaker: Alexander Wright
Stanford University

Thursday, November 16, 2017
3:45 PM
117 Hayes-Healy Hall

Title: Dynamics, geometry, and the moduli space of Riemann surfaces

Abstract:

The moduli space of Riemann surfaces of fixed genus is one of the hubs of modern mathematics and physics. We will tell the story of how simple sounding problems about polygons, some of which arose as toy models in physics, became intertwined with problems about the geometry of moduli space, and how the study of these problems in Teichmuller dynamics lead to connections with homogeneous spaces, algebraic geometry, dynamics, and other areas. The talk will mention joint works with Alex Eskin, Simion Filip, Curtis McMullen, Maryam Mirzakhani, and Ronen Mukamel.

Nieuwland Lecture Series

"The Nieuwland Lecture Series was established in 1943 by Rev. J. Hugh O'Donnell, C.S.C., then President of the University of Notre Dame, as a permanent memorial to the late Rev. Julius A. Nieuwland, C.S.C. Nieuwland was born in Hansbeke, Belgium in 1878, earned an A.B. at the University of Notre Dame in 1899, and after earning a Ph.D. in chemistry at Catholic University, joined the faculty of the University of Notre Dame in 1904 as a professor of botany, then later as a professor of organic chemistry from 1918 until his death in 1936".