

# UW Department of Mathematics

## Complex Analysis Seminar

DATE: Tuesday, October 13<sup>th</sup>, 2009

TIME: 1:30pm

PLACE: Padelford C-401

SPEAKER: Burglind Jöricke, MSRI

TITLE: Analytic Continuation: From Analysis to Geometry

ABSTRACT:

Extension of analytic functions of one variable led to the notion of Riemann surfaces and has applications to many branches of mathematics. After a brief recollection I will focus on the effect in several complex variables which made the multi-dimensional theory geometric from the beginning and led to the notion of Stein manifolds and envelopes of holomorphy.

I will describe a new construction of envelopes of holomorphy of domains in terms of equivalence classes of analytic discs. The construction is purely geometric and does not refer to the set of analytic functions in the domain. Several corollaries will be discussed.