Title:

In the eye of the beholder: A brief look at the aesthetics of mathematics

Abstract:
Many of us have had an aesthetic experience in mathematics. Finding a beautiful result, noticing a symmetry, discovering some hitherto unknown connection are events that bring about both emotional and intellectual satisfaction. However, to date, we know little about what the aesthetic experience of mathematics actually consists in. While many mathematicians have written about beauty, we have few systematic frameworks with which to provide any depth or clarity to what the term actually means. This talk takes on a rather modest task of describing one aspect of the aesthetic experience, namely the belief that a certain proof is the "right" one, or the appropriate one in some sense, for a given theorem. Based on collaboration with several spirited mathematicians at Umeå University, I will present a sketch for what we refer to as the notion of "mathematical fit."