Michigan Math Club

Thursday at 4pm in the Nesbitt Room
Free Pizza and Pop

The Complexity of Complex Structures

Paul Reschke

Abstract for 20 February

We will discuss the relationship between real tori and complex tori. We will begin by reviewing complex structures on the real plane and constructions of the two-dimensional real torus from lattices in the real plane. We will then give a simple argument to show that, while there is only one two-dimensional real torus, not all complex structures on this torus are the same. We will conclude by briefly describing one way to see that complex structures on the four-dimensional real torus can be dramatically different.