

DALHOUSIE MATHEMATICS COLLOQUIUM

Monday January 14 2019, 3:30 pm, Chase 319

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Theorem proving with Isabelle/HOL

Mathematical proofs should, in theory, guarantee that a theorem is correct. Unfortunately, in practice proofs are complicated and error prone, and we can never be sure if we did not overlook some mistakes. Computer-aided theorem proving solves this problem: if the computer accepts the proof, it is correct. One advanced theorem proving environment is Isabelle (<https://isabelle.in.tum.de/>). I will tell a bit about theorem proving in general, how it works in Isabelle, and demonstrate how proofs are actually written in such a proof assistant.