

Computability, Unsolvability, Randomness
Math 497A: Student Research Projects

Stephen G. Simpson

Due 8:00 AM, December 10, 2007

Dory Deines: unsolvability of the problem of integrability in finite terms.

Bryan Gillespie: alternative notions of randomness.

Jorge Gonzalez: Hilbert's 10th Problem.

Alison Green: randomness and convergence rates in the Strong Law of Large Numbers.

Sara Jensen: implementation of register machines in Mathematica.

Chor Lam: effective Hausdorff dimension.

Vincent Martinez: modular machines and unsolvability of the word problem for groups.

Daniel McDonald: tilings of the plane.

Timur Nezhmetdinov: finite lattices of Turing degrees.

Matt Pancia: randomness and the Law of the Iterated Logarithm, etc.

Noopur Pathak: randomness and the Lebesgue Differentiation Theorem.

Peter Risch: alternative notions of randomness and low-for-randomness.

Soumya Sanyal: mass problems.

Stephanie Tougas: Kolmogorov complexity.

Robin Tucker-Drob: creative sets and the Gödel Incompleteness Theorems.

Ashley Wheeler: finite lattices of Turing degrees and the jump operator.