1163-94-1510David Jao* (djao@uwaterloo.ca), 200 University Ave. W, Waterloo, Ontario N2L3G1, Canada.Implementation of isogeny-based cryptography. Preliminary report.

The past few years have seen dramatic progress in state of the art algorithms for implementing and evaluating isogenies in the context of public-key cryptography. In this talk we survey recent improvements in the asymptotic complexity of isogeny evaluation and present detailed case studies of optimized performance benchmarks. (Received September 15, 2020)