

Randomness extractors

Date Tuesday, September 9

Time 5 pm

Location 507 Mathematics

Abstract: Extractors are functions which distill the randomness in weak random sources, initially conceived to make use of low-entropy natural phenomena in probabilistic computation. However, these combinatorial objects turned out to be extremely useful to numerous other applications, including sampling, hashing, sensing, error correction, derandomization and more. In this talk I will define extractors and demonstrate their utility. Then I'll discuss some highlights of the (very recently completed) 20-year quest to explicitly constructing extractors with near-optimal parameters.