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Sam Buss and **Mia Minnes*** (minnes@math.ucsd.edu). *New investigations in probabilistic strategies for algorithmic randomness.*

Probabilistic betting strategies provide a method of characterizing algorithmically random sequences, including Martin-Lof random sequences and (partial) computably random sequences. We generalize probabilistic betting strategies to allow probabilistic moves at every step, not just at betting steps; we also consider restricting randomness to binary choices (or, “coin flips”). We prove that these modifications do not change the strength of probabilistic betting strategies. We give a new proof of the separation of Martin-Lof randomness and partial computable randomness using probabilistic betting strategies. (Received September 10, 2013)