

The Value of Errors in Proofs

Abstract:

I will describe some highlights along the journey that started with the invention of Interactive Proofs (IP) in the mid 80s, a notion of proof which allows interaction, randomness, and errors. Variations on this theme have continued to produce fundamental, beautiful and surprising results with unexpected implications to this day (most recently, the breakthrough " $MIP^*=RE$ ", that as corollary refuted some basic conjectures in mathematics). The talk will be informal and high-level.