
BRUCE REED, McGill

The Lovasz Local Lemma

Laci Lovasz has made numerous seminal contributions to theoretical computer science, especially to the development of algorithms, in recognition of which he was awarded a Kyoto Prize this year. His Local Lemma is a simple, easily proved, but powerful tool for proving the existence of objects with desired properties. It turns out, somewhat surprisingly, that it can also be used to construct or find the desired objects. This survey talk will discuss the lemma and its algorithmic applications.