

abstract

COMPUTER SCIENCE/DISCRETE MATH I

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

In 1951 Nash proved that every game has a Nash equilibrium. The proof is non-constructive, reducing the existence of Nash equilibria to that of Brouwer fixpoints. Whether Nash equilibria can be computed efficiently had remained open. I shall outline our recent proof (with Daskalakis and Goldberg) that the problem is intractable (technical term: PPAD-complete). The proof is by a reduction from Brouwer, establishing a close computational link between these two important existence theorems.