המחלקה למתמטיקה, בן-גוריון

קולוקוויום

ביום שלישי, 10 בנובמבר, 2015

בשעה *15:30 – 14:30*

ב*Math -101*

ההרצאה

fusion information of topology dimensional Low

תינתן על-ידי

(BGU) Moskovich Daniel

תקציר: It has been suggested that every good mathematical pattern ought to be manfiest in nature. This talk surveys the speaker's work with A.Y. Carmi on a manfiestation of low-dimensional topology's diagrammatic calculus of tangles in the theory of information fusion networks e.g. sensor networks and complex systems. It turns out that various sets of information-theoretic quantities such as sets of entropies naturally admit an algebraic structure called a quandle. The diagrams are similar but not identical to classical tangle diagrams, and our topological toolbox is completely dffierent from the toolbox of statistical inference. Our work involves studying their diagrammatic algebra. The talk is planned to be accessible to a general mathematical audience.