

המחלקה למתמטיקה, בן-גוריון

קולוקוויום

ביום שלישי, 5 במרץ, 2019

בשעה 14:30 – 15:30

ב-101 Math

ההרצאה

eigenfunctions of points Critical

תינתן על-ידי

University) Aviv (Tel Buhovski Lev

תקציר: On a closed Riemannian manifold, Courant's nodal domain theorem gives an upper bound on the number of nodal domains of an n -th eigenfunction. In contrast, there does not exist a bound on the number of nodal domains of a critical point of the Laplacian. We will sketch a proof of the existence of isolated critical points of the Laplacian on a 2-dimensional torus, which has infinitely many eigenfunctions, each of which has infinitely many isolated critical points. Based on joint work with A. Logunov and M. Sodin.