הטכניון
מכון טכנולוגי
לישראל

הפקולטה
למתמטיקה

The Faculty of Mathematics
Invites you to the

Pizza seminar

Time &

Wednesday, March 27, 12:30
8th floor lounge, Amado bldg

Title

Mean curvature Flow and Applications

Speaker

Daniel Goldberg (Technion)

Abstract

A hypersurface moving so as to decrease its area in the most efficient way possible (in the L^2 norm) is said to evolve by Mean Curvature Flow. The Mean Curvature Flow is considered by many to be the most natural equation in extrinsic geometry as it is the L^2 gradient flow of the area functional. In this talk we will introduce the Mean Curvature flow by first deriving it as a gradient flow. Subsequently, we will present its basic properties including short time well-posedness, maximum principle, and some geometric attributes. Finally, we will show applications of the Mean Curvature Flow to material science and image processing.