

Topics in Geometry Seminar

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Real Vector Bundles and KO-Theory I

Date: March 1, 2017

Time: 11:30 - 1:00 PM

Room: Math Lounge 307.20

Abstract:

In this talk we shall discuss the real vector bundles and their constructions in details. The talk will be example oriented and we will study the different methods of real vector bundles' constructions, such as clutching function construction on S^n , real structures on complex vector bundles and how one can formulate it in terms of structure group reduction from $U(n)$ to $O(n)$. Furthermore, the algebraic structure of the KO-theory will be introduced and a proof of Bott periodicity based on this structure will be presented.