



THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Seminar in Geometry and Topology

Room A ,Feinberg Graduate School Building  
on Tuesday, Dec 20, 2016  
at 16:00

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Schwartz functions on real algebraic varieties

Abstract:

We define Schwartz functions and tempered functions on affine real algebraic varieties, which might be singular. We prove that some of the important classical properties of these functions, such as partition of unity, characterization on open subsets, etc., continue to hold in this case. Some of our proves are based on the works of Milman, Bierstone and Pawlucki on Whitney's extension problem and composite differentiable functions. Joint work with Ary Shaviv.