



THE WEIZMANN INSTITUTE OF SCIENCE
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Seminar in Geometry and Topology

Room 1 ,Ziskind Building
on Tuesday, May 15, 2018
at 16:00

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WIS

On the Generic Rank of the Baum-Bott Map

Abstract:

The Baum-Bott indexes are important local invariants for singular holomorphic foliations by curves with isolated singularities. On a compact complex manifold, we consider foliations with fixed cotangent bundle. Then, the Baum-Bott map associates to a foliation its Baum-Bott indexes on its singularities. We focus on foliations on the projective space and we are interested in the generic rank of that map. The generic rank for foliations on the projective plane is known. For high-dimensional projectives spaces, we give an upper bound and in some cases we determine the generic rank.