



Analysis, Algebra & Geometry Meetings

DIPARTIMENTO SMFI - UNIVERSITÀ DI PARMA

11.04.2024

16:30

SALA RIUNIONI - PLESSO DI MATEMATICA

MEHDI LEJMI (CITY UNIVERSITY OF NEW YORK)

CONFORMALLY SYMPLECTIC STRUCTURES AND THE LEFSCHETZ CONDITION

Vaisman's foundational result for compact complex manifolds state that if the complex manifold is Kähler, then every locally conformally Kähler structure is globally conformally Kähler. In this talk, we prove a symplectic analogue of Vaisman's theorem. More precisely, on any compact symplectic manifold satisfying hard Lefschetz in degree 1, any locally conformally symplectic structure is in fact globally conformally symplectic whenever the symplectic form and the locally conformally symplectic structure shares a compatible almost complex structure. This is a joint work with Scott Wilson.