

SEMINARIO DI GEOMETRIA E ALGEBRA

UNIBA - POLIBA

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Dipartimento di Matematica UniBa, Sala Riunioni, primo piano.

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Complex geometry of the full quantum flag manifold of quantum SU_3

Abstract. This talk is based on a work in collaboration with R´eamonn ´O Buachalla and Junaid Razzaq on a quantum deformation of the complex geometry of the full flag manifold of SU_3 , the simplest non-irreducible case of flag manifold. This is given by a quantum De Rham complex that includes the calculus already discovered by ´O Buachalla and Somberg as its holomorphic part. I shall review this construction that makes use of Lusztig quantum root vectors, while at the same time giving a general overview of the theory of noncommutative differential calculi for quantum homogeneous spaces.



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