RÉAMONN Ó BUACHALLA, Université libre de Bruxelles
The noncommutative geometry of the quantum flag manifolds

Flag manifolds are a beautiful family of projective Kähler manifolds lying at the crossroads of many approaches to geometry. More recently, quantum flag manifolds are emerging as an analogous point of communication between the various appraoches to noncommutative geometry. In this talk we give an overview of these connections, discussing in particular noncommutative complex and Kähler structures, Nichols algebras, spectral triples, and noncommutative projective algebraic geometry.