QUANTUM CALCULUS AND QUASICONFORMAL MAPS

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One of the main goals of the noncommutative geometry is to translate basic notions of topology, differential geometry and analysis into the language of Bahach algebras. In our talk we shall give several examples of such translation for the objects of classical analysis such as Sobolev space of half-differentiable functions, BMO space or the space of quasisymmetric homeomorphisms. The arising operator calculus is called, following Alain Connes, the quantum calculus.