Dovolujeme si pozvat Vás na

10. MATEMATICKÉ KOLOKVIUM

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Dualities in Mathematics and Physics

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Abstract:

In this talk I will review some geometric analogues of the Fourier transform, which arise in String Theory under the name of 'dualities'. In particular, I will discuss global aspects of T-duality and mention some recent generalisations. T-duality has important applications in different areas of mathematics, for such as in differential geometry, algebraic topology, operator algebras and noncommutative geometry to name a few. For example, it provides degree shifting isomorphisms of certain cohomologies and K-theories associated to topologically distinct manifolds. This is a talk aimed at non-specialists and will include many examples.