

Modern Mathematics Methods in Physics Summer School June 18-29, 2018

Nesin Mathematics Village — Şirince, Izmir, Turkey

Diffeological spaces, Homotopy, Fiber Bundles, Coverings, Monodromy Theorem, Moment Map, Para-Symplectic Quotients, Geometric Quantization, symplectic Diffeology, Integration of Closed Patrick Iglesias-Zemmour Forms and Paths Spaces, Virasoro Group and Souriau's Cocycle, Differential Calculus, De Rham Complex, Homotopic Invariance, Chain-Homotopy Operator, Stokes Formula.

Categories & Toposes Limits/Colimits, Adjoint Functors and Kan Extension, Categories of Pre-Sheaves, Simplicial Sets and Simplicial Pre-Sheaves, Simplicial Sheaves on The Site of Smooth Manifolds and Formal Manifolds... and Supermanifolds, Higher Pre-Quantization.

C*-Algebras, Gelfand-Naimark Duality, Vector Bundles, K-Theory,

Non-Commutative Geometry Serre-Swan Theorem, Quantum Tori, Noncommutative Quotients, Foliations, von Murad Özaydın Neumann Algebras, Morita Equivalence, Hopf Algebras and Quantum Groups, Affine, Projective and Derived Noncommutative Algebraic Geometry, Noncommutative Stone-Weierstrass Theorem, Cyclic Cohomology, Connes-Chern Character: Topological Index = Analytic Index, Spectral Triples.

We will be able to partially cover accommodation for approximately 30 participants. If you would want to apply for accommodation, the deadline for registration is the 30 of March 2018.

Registration: https://matematikkoyu.org/etkinlik-detay.php?egitimkod=203 Contact: Aslı Can Korkmaz (+090 533 962 11 43) aslicankorkmaz@nesinvakfi.org

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