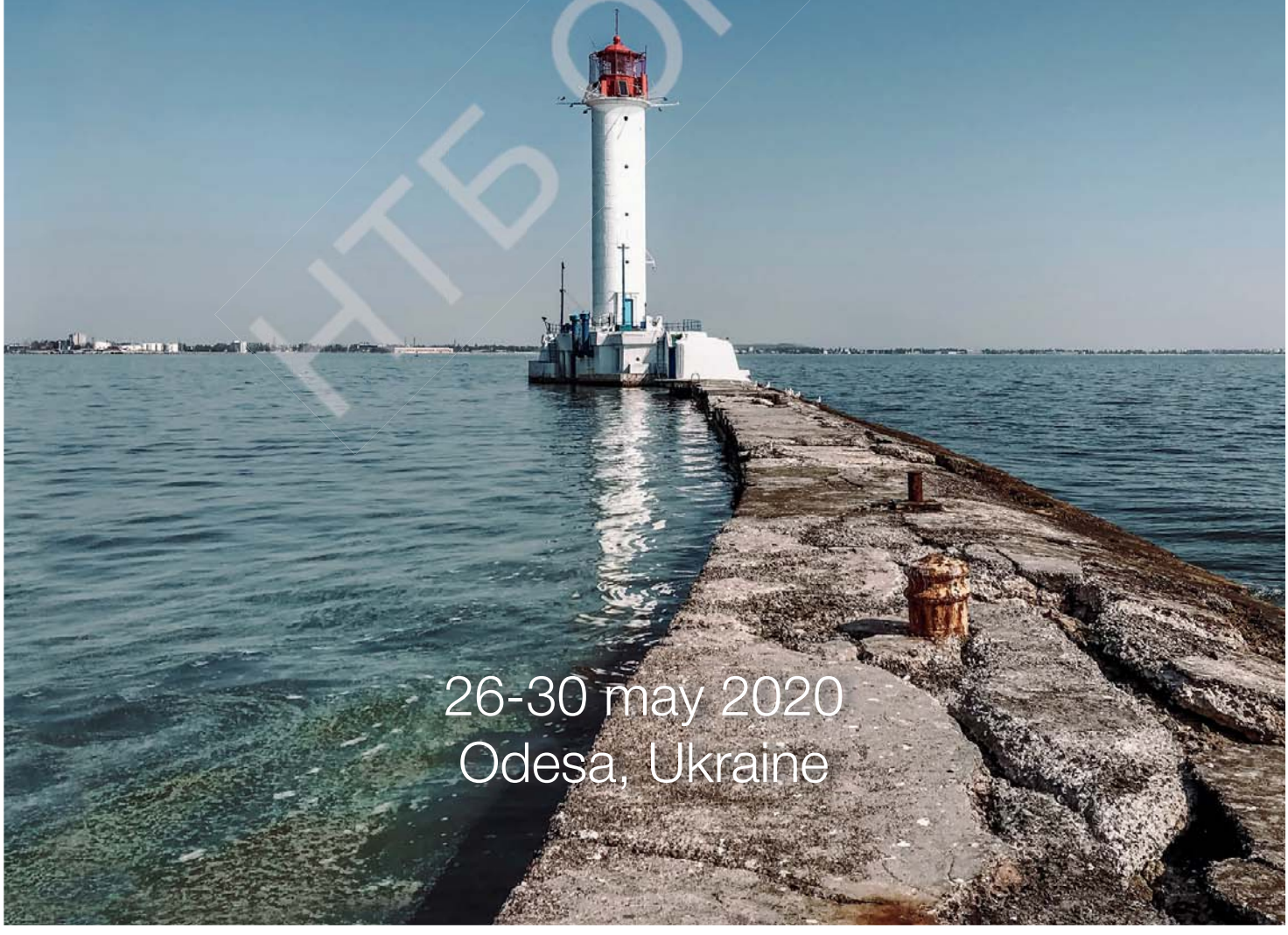
International
Scientific Conference

Algebraic and Geometric Methods of Analysis



26-30 may 2020
Odesa, Ukraine

List of topics

- Algebraic methods in geometry
- Differential geometry in the large
- Geometry and topology of differentiable manifolds
- General and algebraic topology
- Dynamical systems and their applications
- Geometric problems in mathematical analysis
- Geometric and topological methods in natural sciences

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Motivic hypercohomology solutions in field theory II

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2010 AMS Classification: 13D03, 13D09, 18G40, 19D23, 19D55, 24D23.

Keywords: Derived Categories, Derived Tensor Products, Étale Sheaves, Geometrical Motives Categories, Hypercohomology, Quantum Field Equations, Tensor Derived Category.

The determination of a hypercohomology as cohomology group where are defined the solutions of the field equations obeys to the triangulated derived categories that permit an scheme (triangle) commutative whose integrals are solutions of the field equations. The determination of this hypercohomology arises of the fact of that derived motivic category $\mathrm{DM}_{\mathrm{gm}}(k)$, which is of the motivic objects whose image is under $\mathrm{Spec}(k)$, that is to say, an equivalence of the underlying triangulated tensor categories, compatible with respective functors on $\mathrm{Sm}_k^{\mathrm{Op}}$. The geometrical motives will be risked with the moduli stack to holomorphic bundles. kewise, is analysed the special case where complexes $C = \mathbb{Q}(q)$, are obtained when cohomology groups of the isomorphism $H^p_{\acute{e}t}(X, F_{\acute{e}t}) \cong H^p_{\mathrm{Nis}}(X, F_{\mathrm{Nis}})$, can be vanished for $p > \dim(Y)$. We observe also the Beilinson-Soulé vanishing conjectures where we have the vanishing $H^p(F, \mathbb{Q}(q)) = 0$, if $p \leq 0$, and $q > 0$, which confirms the before established. Then survives a hypercohomology $\mathbb{H}^q(X, \mathbb{Q})$. Then their objects are in $\mathrm{Spec}(\mathrm{Sm}_k)$. Likewise for the complex Riemannian manifold the integrals of this hypercohomology are those whose functors image will be in $\mathrm{Spec}_H \mathrm{SymT}(\mathrm{OP}_{L_G}(D))$, which is the variety of opers on the formal disk D, or neighborhood of all point in a surface Σ.

References

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Зміст