

INSTITUTUL DE MATEMATICA "SIMION STOILOW" AL ACADEMIEI ROMANE
cu sprijin BITDEFENDER

F-manifolds and metrics on them and unfoldings of isolated hypersurface singularities

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la sediul **IMAR, sala 306 -307 "C. Bănică"**

Abstract: An F-manifold is a complex manifold with a multiplication on the holomorphic tangent bundle with some integrability condition. Important examples arise in mirror symmetry and in the theory of isolated hypersurface singularities, there as base spaces of universal unfoldings. In the last cases, there is additionally a canonical positive definite hermitian metric with interesting properties on the F-manifold. It is related to (a noncommutative generalization of) Hodge structures. Also, in the last cases and many other cases, one can enrich the F-manifold with a (non-canonical, but to be chosen) flat holomorphic metric to a Frobenius manifold. The talk will be a survey on these subjects, and it will contain old and new open problems.

