

INSTITUTUL DE MATEMATICA “SIMION STOILOW” AL ACADEMIEI ROMANE
cu sprijinul **BITDEFENDER**

anunță **conferința** cu titlul

*Surgery equivalence relations of 3-manifolds
defined by subgroups of the Torelli group*

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conferința va avea loc

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la sediul **IMAR**, sala 309-310

Surgery equivalence relations of 3-manifolds defined by subgroups of the Torelli group

Abstract: Two compact oriented 3-manifolds M and M' are said to be " Y_k -equivalent" if M' is obtained from M by "twisting" an arbitrary surface E of M with a homeomorphism belonging to the k -th term of the lower central series of the Torelli group of E . The " J_k -equivalence" relation is defined in a similar way using a homeomorphism of E acting trivially on the k -th nilpotent quotient of the fundamental group of E . In this talk, we shall review what is known about these equivalence relations and we will focus on a specific class of 3-manifolds, namely the monoid of homology cylinders. We shall characterize these relations for $k=1,2,3$ using classical and quantum invariants. (This talk is based on joint works with K. Habiro & J.-B. Meilhan.)

Conferința are loc în cadrul seminarului de Topologie