WESTFÄLISCHE
WILHELMS-UNIVERSITÄT
MÜNSTER

FACHBEREICH 10
MATHEMATIK UND INFORMATIK
Prof. Dr. Dr. h.c. Joachim Cuntz
Dekan

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Einladung

Am Mittwoch, dem 16. Dezember 2009, Seminarraum N 2, 16.00 Uhr

spricht

PhD Bernardo Uribe Jongbloed, Bogota

String Topology for Orbifolds

Zusammenfassung:

String Topology accounts for the study of the topological properties of the spaces of loops or paths of some specific kind on a manifold. When one studies the topological properties of the space of free loops on an orbifold (a manifold endowed with the action of a finite group of symmetries) one encounters interesting relations with the Chen-Ruan cohomology of the orbifold and with the Hochschild cohomology ring of certain differential graded rings of singular cochains associated to the orbifold.

In this talk I will start by reviewing some results on the string topology for manifolds and I will continue by explaining how we have generalized some of them to the case of orbifolds.

Then I will explain how the string topology for orbifolds relate to the Chen-Ruan cohomology for orbifolds and I will finish by stating some recent results that tell what is the relation with the Hochschild cohomology of certain differential graded ring associated to the orbifold.

<u>Auf diesen Vortrag wird besonders hingewiesen</u>

Joachim Cuntz, Dekan