GEOMETRIC BAR CONSTRUCTION - 1

SPEAKER: P. DALAKOV

1. Time and place:

Friday, May 30, room 503, IMI.

Time: 15:30

Special time, due to scientific council meeting

2. Abstract

In algebraic topology, one constructs, for a topological space X and a topological group G, a classifying space BG for topological G-bundles. It comes equipped with a universal G-bundle $EG \to BG$. These spaces are unique up to homotopy, their most famous model being Milnor's.

In this talk we are going to discuss the "geometric bar construction" due to Milgram and Dold–Lashof. If G is an abelian (countable CW-) topological group, this construction produces models for EG and BG which are topological groups, and $EG \to BG$ is a group homomorphism.

We are also going to endow these spaces with smooth/holomorphic space structure, whenever X is smooth/complex manifold, following Gajer.

Date: May 23, 2014.