Seminar

Topology of Exotic Spheres

Wintersemester 2014-2015

This Reading Seminar will deal with the topology of exotic spheres.

Particular attention will be devoted to the groundbreaking results of Milnor, who first proved the existence of exotic structures in spheres, and Kervaire-Milnor who proved that exotic spheres of any fixed dimension (≠ 3, 4) form a finite group under connected sum.

The computation of such groups relies, for some n, on the solution of the so-called Arf-Kervaire invariant problem, which has recently been almost completely solved. If time permits, we will talk about this problem, and sketch its proof.

This seminar will be held in English.