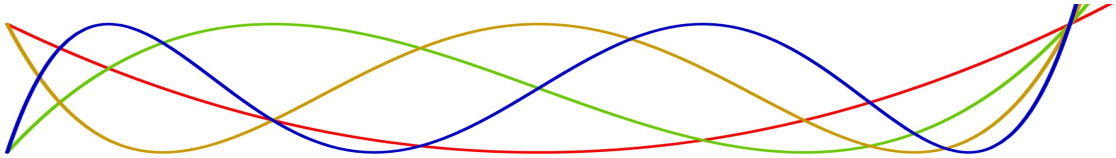

Аналитический семинар лаборатории Чебышева

Четверг, 17 мая 2018, 15:30, ауд. 413, 14-я линия В. О., 29

Michal Wojciechowski

On the Pelczynski conjecture on the number of Auerbach bases

We give the estimate on the number of different Auerbach bases in n dimensional Banach space. When Plichko remarked that in every Banach space there are at least 2 different Auerbach bases, Pelczynski conjectured that in n-dimensional space it should be always at least n of them. We confirm this conjecture showing that there are at least $n(n-1)/2+1$ of them. The estimate follows from the calculation of the Lusternik–Schnirelmann category of the flag variety. A better estimate is obtained for generic smooth Banach spaces using Morse theory. In this case the number of Auerbach bases is greater then the exponential function of dimension. Joint work with A. Weber.

Приглашаются все желающие!