COMPUTING EXPLICIT HOMOLOGY CLASSES USING DISCRETE MORSE THEORY

DMITRY FEICHTNER-KOZLOV

In this talk we shall describe a combinatorial method related to Discrete Morse Theory, which allows us to calculate explicit homology cycles. These cycles will form a basis, in the case when the critical cells are in an isolated dimension. We shall illustrate the use of this technique by several examples from combinatorial topology.

FACULTY OF MATHEMATICS AND COMPUTER SCIENCE, UNIVERSITY OF BREMEN *Email address*: dfk@math.uni-bremen.de