Seminar/Talk

Knot Floer homology and the Upsilon function

Andras Stipsicz

Alfréd Rényi Institute of Mathematics

Host: Tamas Hausel

Knot Floer homology (an invariant discovered by Peter Ozsvath
and Zoltan Szabo around 2001) provides a number of invariants
to study knots, links, and relations among them.
The knot Floer chain complex (a slightly complicated algebraic
object associated to a knot by the theory) can be used to
define these numerical invariants.
More recently, in a joint project with P. Ozsvath and Z. Szabo,
we found a piecewise linear continuous function (the Upsilon-function of
the knot) determined by the knot Floer chain complex.
In the lecture I plan to review the most important knot invariants,
starting with the Alexander polynomial. After the description of the
knot Floer chain complex, I will outline the definition of the
Upsilon function, and will present some simple applications.

Wednesday, June 7, 2017 01:45pm - 03:45pm

Big Seminar room Ground floor / Office Bldg West (I21.EG.101)