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KNOTOIDS AND VIRTUAL KNOTS

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Abstract

In this talk we first go through the basics of two natural generalizations of classical knot theory; the theory of knotoids and virtual knots. Knotoids, introduced by Turaev in 2010, are knotted arcs in surfaces possessing two free ends, and producing a diagrammatic and three dimensional interpretation for this freedom. Virtual knots, introduced by Kaufman in 1998, are knots in thickened surfaces taken up to stabilization relation. We utilize a ‘virtual closure’ to connect these two knotted categories, and we show that there are virtual knots of genus one that are not virtual closures of knotoids in S^2 . (joint work with Louis Kauffman).

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Time: 15:00

Place: IMBM Seminar Room, Boğaziçi University South Campus