1128-51-79Neslihan Gügümcü* (nesli@central.ntua.gr), National Technical University of Athens,
Zografou Campus, Iroon Polytechniou 9, 15780 Athens, Greece. Parity in Knotoids.

A classical knotoid diagram is a generic immersion of the unit interval into S^2 , with two distinct endpoints. A long knot normally has its endpoints in a single region of the knot diagram. Classical knotoids generalize the notion of long knots by allowing the endpoints to be in different regions. The combinatorial distance between the endpoints (in terms of crossing the boundaries of regions) is called the height of the knotoid diagram. The height is a classical knotoid invariant that tells us how far a knotoid is from being a knot. A classical knotoid is called knot-type if it has zero height. In this talk, we first examine the basic notions of classical knotoids. We define the virtual closure map that connects the theory of knotoids with the theory of virtual knots. We show that the virtual closure map is not surjective with (an infinite set of) examples of virtual knots of genus one that are not in the image of the virtual closure map. We introduce the notion parity for classical knotoids and discuss the theorems of Nikonov and Manturov concerning projection maps from virtual knots to classical knots by using parity. We give a proof to Turaev's conjecture which claims minimal crossing diagrams of knot-type knotoids have zero height. This is a joint work with Louis H. Kauffman. (Received February 14, 2017)