Title: KNOTOIDS AND THEIR INVARIANTS

In this talk, we will study knotoids in the plane or in the 2-sphere S^2. Knotoids are knotted arcs, generalizing classical knot theory and also 'closing up' to virtual knots. Knotoids can be viewed as line projections of spatial open curves with open ends fixed on two infinite lines. With this interpretation, they provide a topological classification for proteins. I will first introduce essential notions of knotoids and then construct invariants of knotoids.