Extensions of Mantel's theorem
Diana Piguet (University of Birmingham)

Mantel's theorem says that any n-vertex graph with more than $n^2/4$ edges contains a triangle. This basic theorem has been extended in many ways. In the seminar, I'll expose two such directions. The first one deals with the minimal density forcing a triangle tilling. In the second half of the talk, I shall present the notion of Turannical hypergraphs.