MARGARET THOMAS, Purdue University

Definable topologies in o-minimal structures

A definable set together with a definable family which forms a basis for a topology is a 'definable topological space'. Our focus here is on topologies that are definable in o-minimal structures. We will present some progress towards understanding the nature of these spaces, related in particular to their classification and to the identification of suitable definable analogues of classical notions, such as compactness, in this setting. This is based on work arising from a joint project with Pablo Andújar Guerrero and Erik Walsberg.