Maria Angeles Hernandez Cifre (Universidad de Murcia, Spain)

Title: Complete Systems of Inequalities

If we are studying one or several geometric inequalities (concerning several geometric magnitudes), we can ask if such a collection of inequalities is large enough to determine the existence of a convex set. This collection is called a "complete system of inequalities". The first problem of this type was posed by Blaschke in 1916 for the 3-dimensional euclidean space, and it is still open. We study complete systems of inequalities for families of convex sets in arbitrary dimension.