

Title: Configurations of intersecting lines or circles

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Abstract:

A configuration of points and lines is an arrangement of lines intersecting in a certain way. If we are only interested in the intersection properties of the configuration, then we study the configuration as an incidence geometry. Incidence geometries are combinatorial objects, but they are also studied as geometric objects, as realisations of groups, in graph theory, in algebra, in design theory for statistics and they are useful for the construction of error-correcting codes, for example. In this talk I will survey some aspects of configurations. I will also show how to generalise the pentagon and how to draw configurations of points and circles on Riemann surfaces.