

---

**KHALEGH MAMAKANI**, University of Victoria

*Simple symmetric Venn diagrams with 11 and 13 curves*

A collection of  $n$  closed curves in the plane, with no three curves intersecting at a common point, is called a simple  $n$ -Venn diagram if it divides the plane into  $2^n$  regions where each region is inside the interior of a unique subset of the curves. A (rotational) symmetric Venn diagram is the one that is invariant under rotation, up to a relabeling of the curves. Here we introduce the first simple Venn diagrams with 11 and 13 curves discovered using a computer search restricted to a new property called crosscut symmetry which is related to dihedral symmetry.