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*Lattice congruences on the weak order*

Lattice congruences on the weak order on a finite Coxeter group are most naturally understood in terms of the geometry of the associated arrangement of reflecting hyperplanes. In this talk, I will begin with an overview of lattice congruences, aimed at combinatorialists. I will then describe how the geometric conditions governing lattice congruences on the weak order can be distilled into a local combinatorial rule. Time permitting, I will also give a description of lattice congruences on the weak order on permutations in terms of the combinatorics noncrossing arc diagrams.