Coordinate Percolation

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In coordinate percolation, i.i.d. random variables are associated with the lines of a grid, and the life or death of a site (or bond) depends on what happens at the lines that cross there. Coordinate percolation tends to arise in problems involving scheduling. We will discuss a number of different types of coordinate percolation, including "collision", "corner", "trixor" and "sum". These vary from being notoriously intractable to so easy that an explicit formula can be obtained for the theta-function (in joint work with Lizz Moseman, NIST).