

## PATTERNS IN RIORDAN ARRAYS

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In this talk we examine some Riordan arrays by using modular arithmetics. One nice thing about modular arithmetic is that there are only a finite number of possible answers. If we assign to each of the possible answers a color, then the triangle can be presented as an array of colored dots or circles and in many cases we can find very interesting patterns in the corresponding image. This is well known in the case of Pascal triangle but we can illustrate many other Riordan arrays which give rise to other interesting situations which are worth to be investigated also from the algebraic and combinatorial point of view. We present some results concerning arrays related to Catalan, Motzkin and Fibonacci numbers or related to the enumeration of binary strings avoiding a pattern as well as to the corresponding inverse arrays.