

## Differential algebraic generating series of walks in the quarter plane

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To a walk confined in the quarter plane we may attach a generating series. The series depends upon three variables and a classical problem is to determine whether this series is solution of algebraic and/or differential equations. In this talk we will explain a very surprising result: the generating series is solution of an algebraic differential equation in one of its variable, if and only if it is solutions of an algebraic differential equation in each of its variable.

### Keywords

Elliptic functions, Walks in the quarter plane

### References

[1] T. DREYFUS, *Differential algebraic generating series of weighted walks in the quarter plane*.