

## **Karolina Sołtys**

### KROPKI ARE PSPACE-COMPLETE

In this talk I would like to study the computational complexity of determining the winner in a given game of Kropki, a paper and pencil game popular in Central and Eastern European countries, sharing some similarities with the game of Go. I will prove that the derived decision problem is PSPACE-complete, basing on the analogous results on the complexity of Go. My proof involves merging approaches of two papers on Go and adding a simple combinatorial gadget to make for the differences between the two games.

#### REFERENCES

- [1] <http://students.mimuw.edu.pl/~ksoltys/kropki.pdf>