

## ORAL COMMUNICATION (RECREATIONAL MATHEMATICS)

### Escape rooms for learning mathematics

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### Abstract

Escape rooms have been gaining popularity among young audiences in recent years. In this context, a team of faculty, researchers and students from the Centre of Mathematics of the University of Minho has created two escape rooms in the last three years that have become a sensation, blending amusement with intellectual stimulation. Seeking both fun and challenge, around a thousand people have already taken part in our escape rooms. ‘Numbers for Everyone’ is a game with an enigmatic component where participants must cooperate and work as a team to overcome various challenges related to cryptographic systems and codes. In the other escape room, ‘Spherical Cubes’, participants are able to perceive ideas and mathematical results that arise with the cubic foam problem, within a mix of fun and intellectual challenge. With a playful and interactive approach, by integrating mathematics into an immersive and engaging environment, these two escape rooms spark interest in mathematics, promote active learning, and develop fundamental skills. In this talk, we will present different activities created for these escape rooms, focusing on two crucial aspects: the work carried out by the students who took part in devising the escape rooms, with a strong research component, and raising awareness of the importance of maths in such diverse areas for basic and secondary school students.

### References

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