

# STOC 2021 – Mystery Hunt

## Day III

Once you have found a solution for the second puzzle (or the answers for the last two days' hunt), email me the answer (or find me on the map):

[clement.canonne@sydney.au.edu](mailto:clement.canonne@sydney.au.edu)

## 1 The Birthday Paradox

That one needs no introduction: you have  $n$  people, you have 365 days, and since *of course*<sup>1</sup> the birthdays are uniformly distributed and every year has exactly 365 days, for  $n \approx \sqrt{356}$  you start to have a pretty decent probability of at least two people sharing the same birthday.

Well, we have  $n \geq 700$  attendees, so the probability that you (you, *specifically*) do not share a birthday with *anybody* around is quite small. Like, less than 15%.



So, err. Please find one, and let me know their name (and yours).

## 2 Image Recognition

The windows are back to what they should – woods, and birds, and waves, and various glorious things. I wish I could say the same for everything, though. I think someone tried to leave a message in the lounge, but I really don't get it.

And they say four pictures are worth four thousands words...

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<sup>1</sup>Of course?<sup>2</sup>

<sup>2</sup>Of course!<sup>3</sup>

<sup>3</sup>Of course...