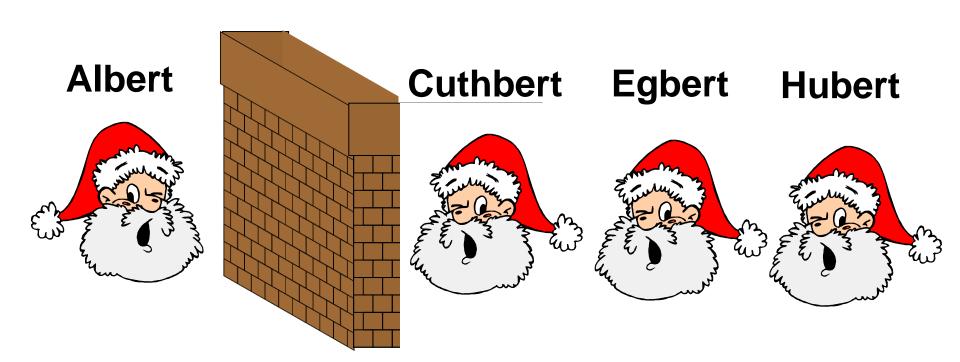
The Hat Trick



Four Father Christmas impersonators have been kidnapped by an evil genius who has

pogonophobia

pogonophobia



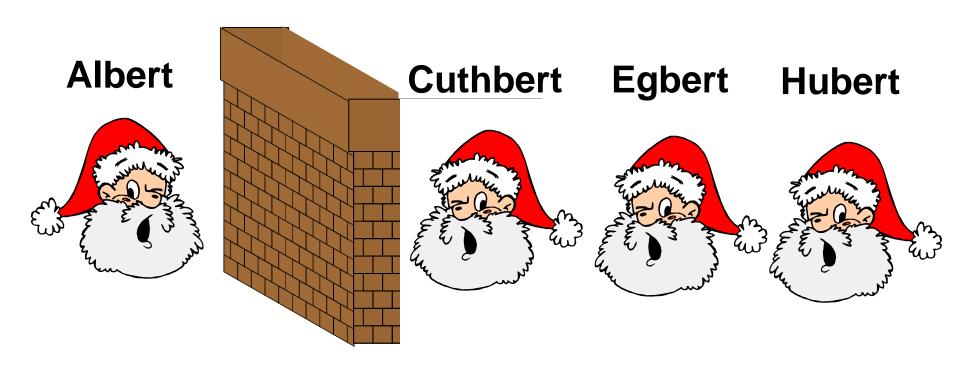
fear of beards

He wants revenge on the plump, whiskery men who have terrified him since childhood.

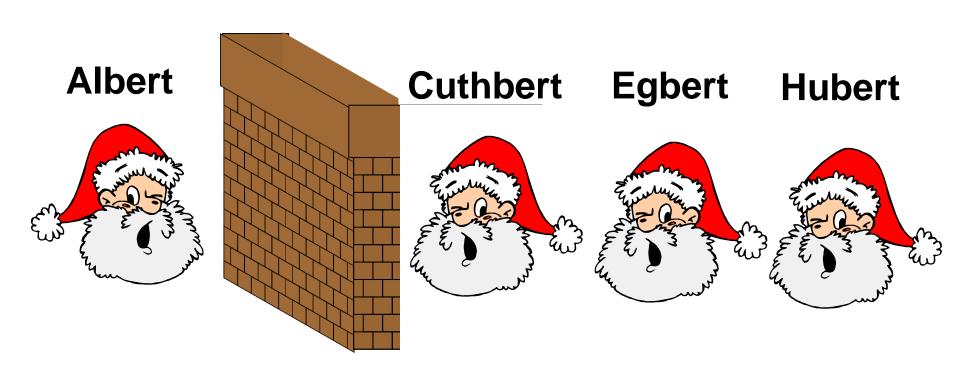
So he has buried them up to their necks in snow. Soon they'll be frozen as solid as Lidl turkeys.

But because it's his birthday, he's going to give them one chance to escape...

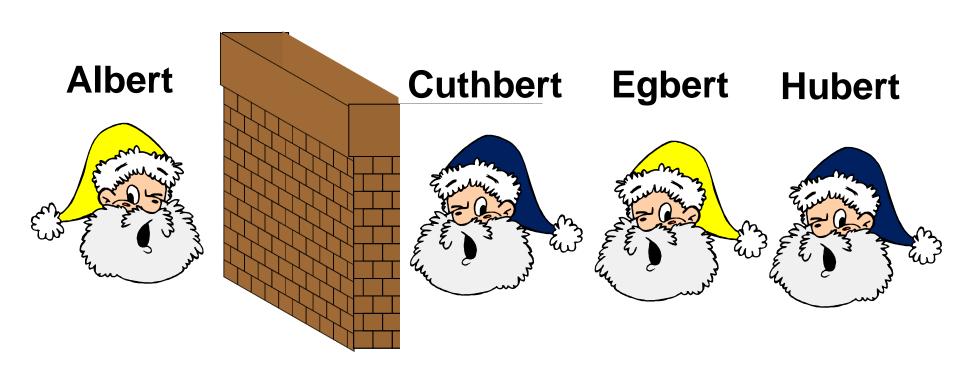
"I have buried you in the snow, one on one side of the wall, three on the other side.



You cannot see over the wall.
You cannot see round the wall.
You cannot see through the wall.

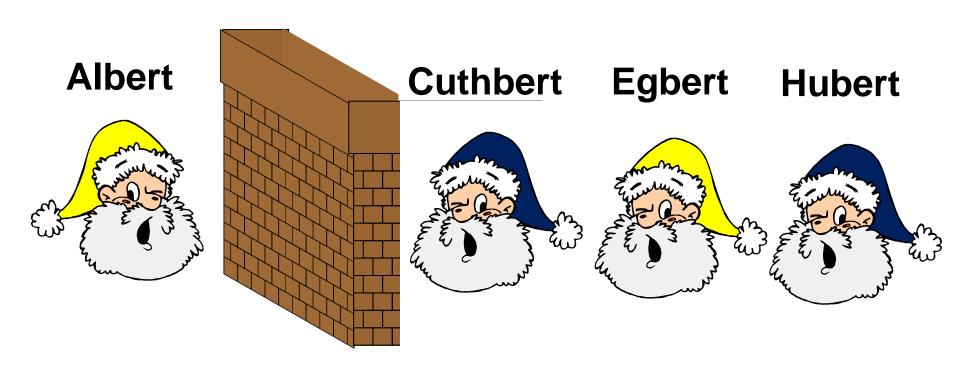


Now I will remove your red hats, and replace them with two blue hats, and two yellow hats.

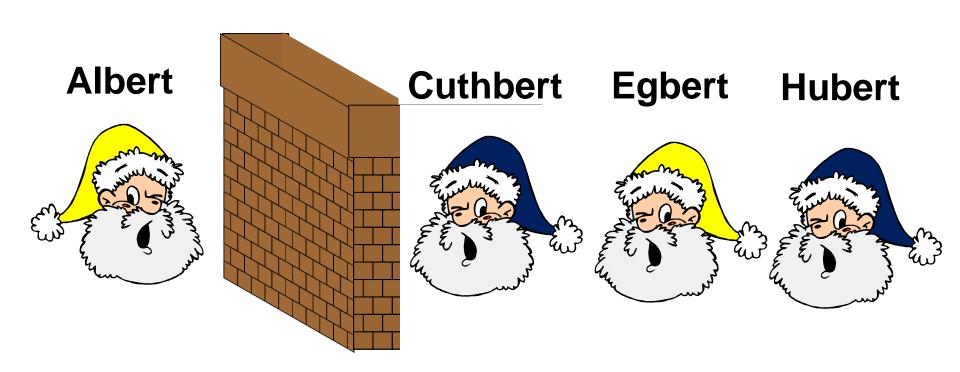


To live, one of you must tell me what colour hat you yourself are wearing.

You cannot see your own hat, only the wall and any hat or hats in front of you.



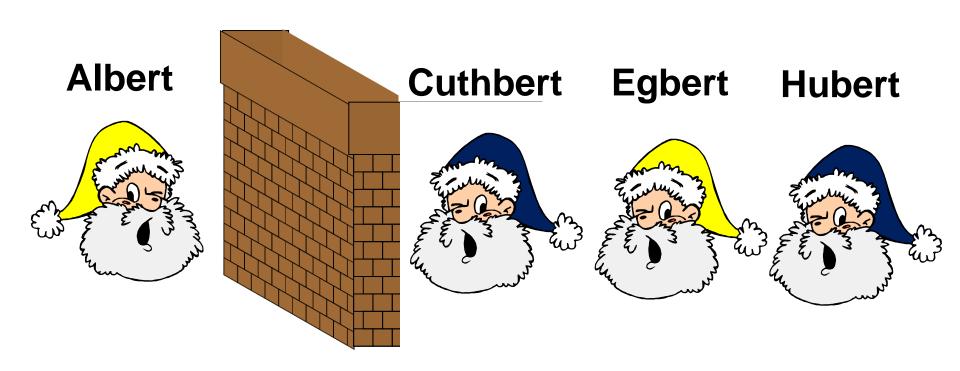
If you get it wrong, I leave you all to freeze. If you speak or signal to each other, I leave you all to freeze.



You cannot turn round.

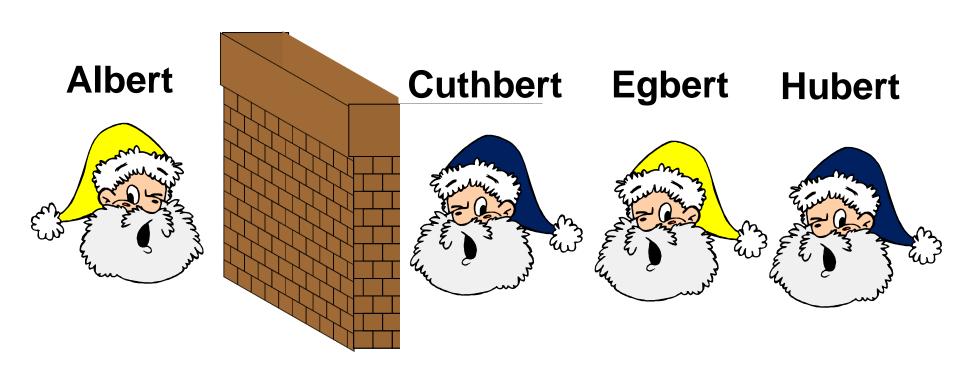
You can only see what is in front of you.

You know you have two blue hats and two yellow hats between you.



You have two minutes for someone to call out the colour of his own hat.

Get it wrong, or if no one calls out: you freeze. Get it right: you all live."



That's Albert, Cuthbert, Egbert and Hubert's challenge.

Your challenge is slightly different...

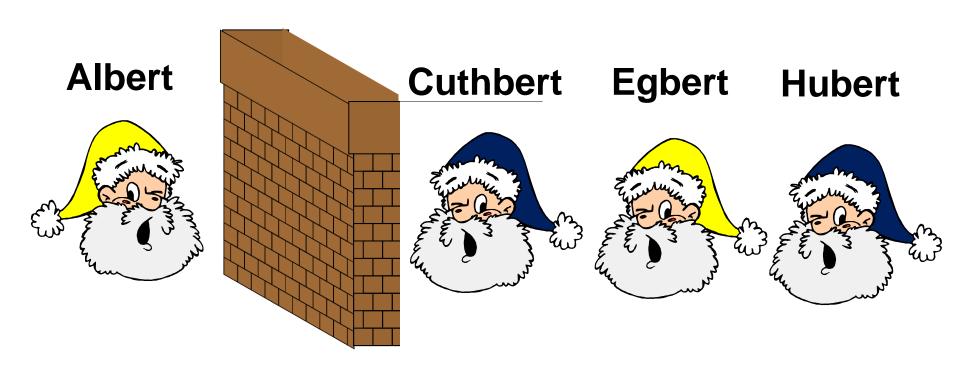
For a minute, nobody says anything.

After one minute, someone calls out his colour.

He gets it right, and he isn't guessing.

He **KNOWS** the colour of his hat.

Who calls out, and how does he know?



If you've worked it out, go forward three slides.

If you haven't worked it out yet, go back a slide.

If you're thinking of giving up, go forward one slide.

Clue number one.

What does the silence tell you?

Clue number two.

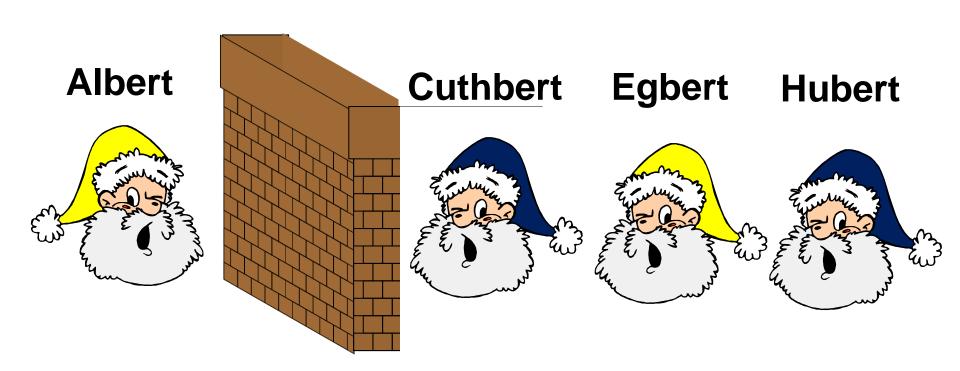
The santa who knows his colour only knows it once he knows nobody else can know theirs.

Who's the last person he knows can't know, and what does knowing that they can't know tell him that he didn't know before he knew nobody else could know.

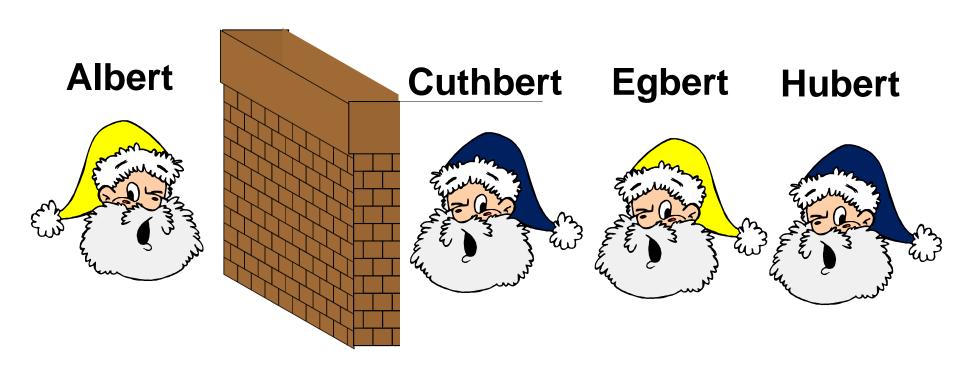


Everyone knows there are two blue hats and two yellow hats.

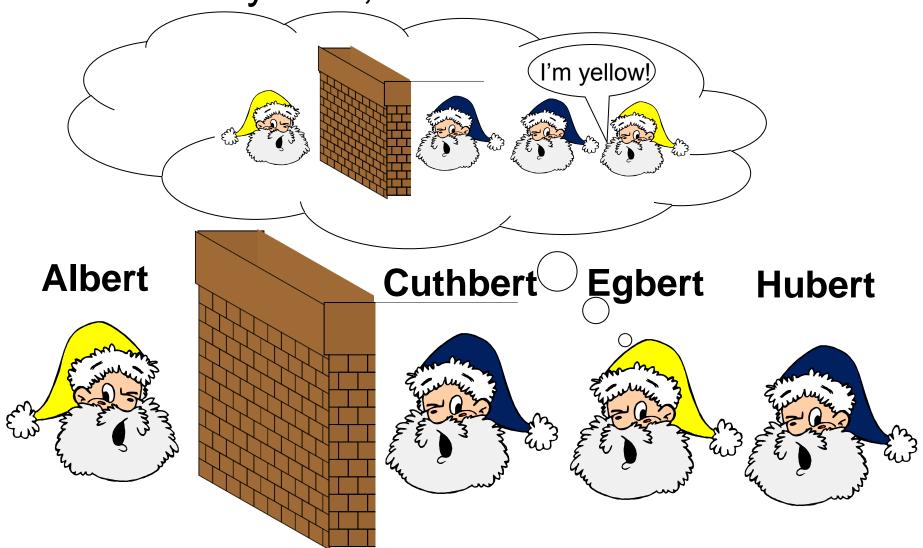
Albert and Cuthbert know nothing else. All they can see is the wall.



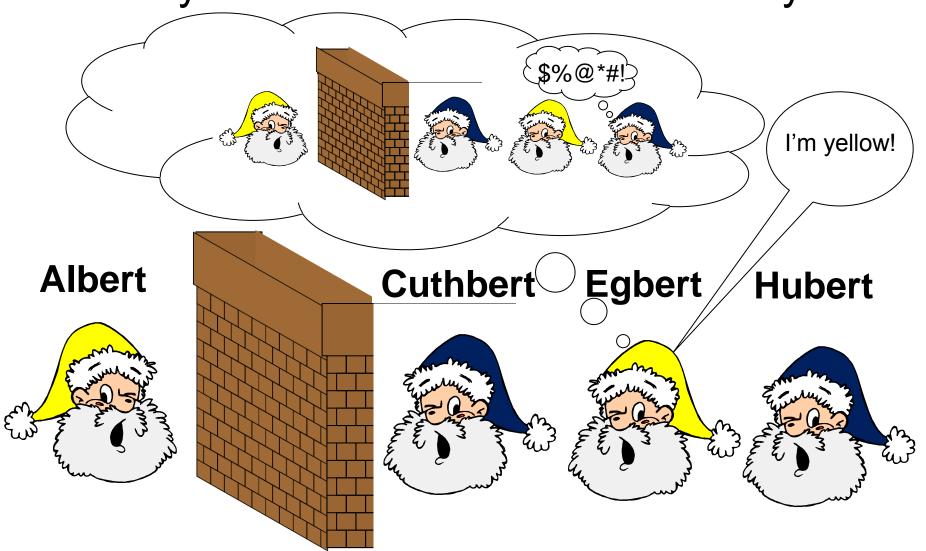
It looks as if Hubert is best placed to know. But it's Egbert who calls out. Egbert's thinking goes like this.



"If Hubert could see two blue hats, he'd know his must be yellow, so he'd have called out.



But he hasn't called out, so he must be able to see one yellow and one blue hat. So I'm yellow.







Like many problems in the real world, both their puzzle and yours took two things working together.









reason

the ability to think carefully from one idea to another









empathy

the ability to see the world through someone else's eyes









or to put them together, being

thoughtful





Another question for you to chew over...

How is knowing different from guessing?

Teachers - for other thoughtful things to use in the classroom, including philosophical thinking games and stories for nursery to KS5 to staff INSET, visit

www.outspark.org.uk

and click on "free stuff".