



"You can't see all my toilet paper in the background?"

"I'll figure this out eventually"

"Don't worry Teletubbies have a natural immunity to COVID-19"



"If the Olympics get cancelled in 2020, then Mario and Sonic will be the only record of it ever happening, baffling future historians"

"Take a guess, Bartlett or Bedding?"

"Technically, no one is ever touching anything due to the electrostatic attraction between atoms, but don't use that as a defense in court"

What's (NOT) On in PhySoc

Change is afoot!

Just over a month since our last rebranding, we, the society formerly known as PhySoc, have a new name! Without consulting any of the other four societies already named SUMS (Musical, Medical, Mathematics, Medical Science), we have decided that we should also be called SUMS.

I can hear the complaints rolling in already.

"It's confusing"

you say.

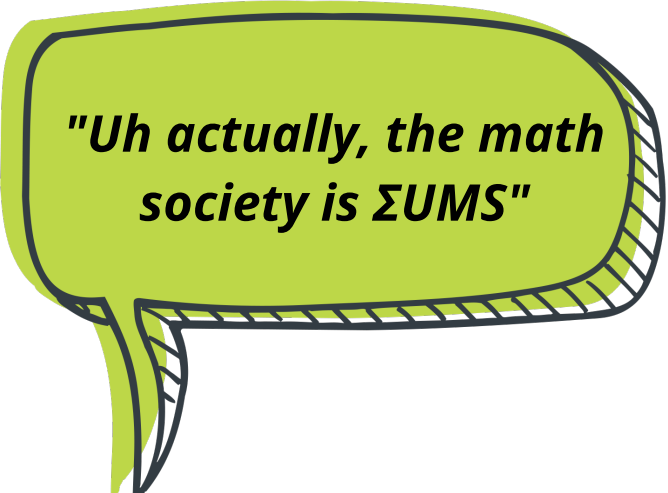
"It doesn't even make any sense",

"Have you gone insane?"

Let me answer the first two.

On confusion:

Firstly, it actually cuts down on confusion about pronunciation. PhySoc's pronunciation exists in a phonetic doublet state: it commonly pronounced in two ways: as F-EYE-soc, or incorrectly as FIZZ-soc. SUMS

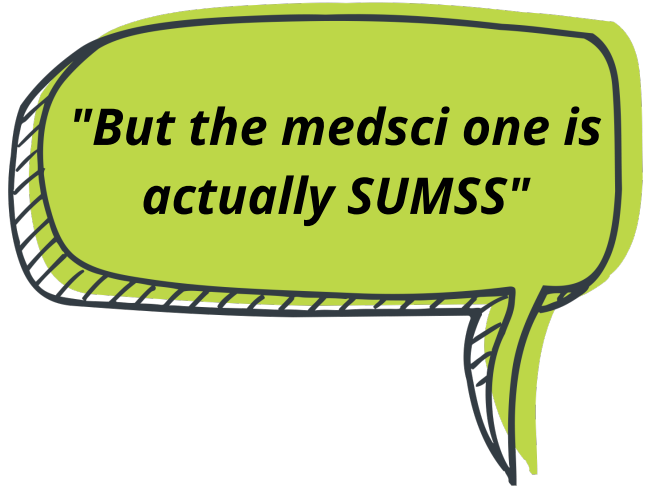


"Uh actually, the math society is Σ UMS"

on the other hand is a phonetic singlet state: it has a singular accepted pronunciation, and by changing the name, we have a compromise we hope will resolve the rift that has grown in PhySoc over pronunciation.

Secondly, if the last three societies that adopted the name SUMS could do so without confusion, why can't we?

"Uh actually, the math society is Σ UMS" Someone inevitably says. Try saying Sigma-UMS without cracking up.



"But the medsci one is actually SUMSS"

Attempting to pronounce this sensibly gives either SUMS or the sum of all "ums", which in the case of mathematicians, does not converge.

"But the medsci one is actually SUMSS" the only addition is an added hiss on the end. Too many medsci students have collapsed with hypoxia from trying to emphasise that extra s too hard.

Finally, any potential confusion could be beneficial for the society. The math society has a devotion by its members approaching that of a cult. If they were to mistake a Physics Society event for a Math Society event, they would arrive at the event, enter in their USU numbers, then leave in disgust at the first $c = \hbar = 1$ or $\sin\theta = \theta$ (i.e. well before the pizza arrives). This would allow the Physics Society to claim funding from the USU based on their attendance, without having to pay for their pizza. We suspect similar trickery may be at play with the medical science society: by tricking the medicine students to mingle at their events, the medical science students can (for a moment) pretend that they are medicine students.

On making sense:

If you've somehow managed to make it this far through this "article" without using it as toilet paper (if you're viewing this digitally, I'd be very concerned if you did that), you're probably wondering how the name works with physics. What would SUMS stand for? One notes that there is no M in physics (unless you're using the largely unaccepted alternate spelling, mphysics).

In the spirit of string theorists, who more or less have abandoned the scientific method, we'd like to take this a step further: henceforth, we shall be known as the Sydney University Metaphysics Society.

PhySoc also considered renaming to integrals as an approximation for matching the name sums. We could go into the details as to why said approximation is appropriate, but in the words of Professor Stephen Bartlett,

"There are subtleties, but we'll skip over them."

- Justin

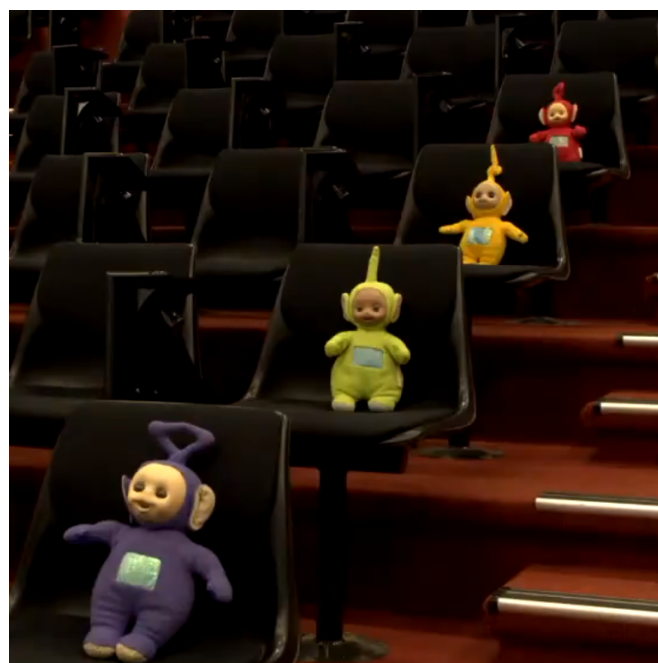
Tim's New Recruits

The first year advanced physics lecture on week 5, Monday was completely empty. No audience to witness the teachings of the great professor Tim Bedding. Tim was not comfortable teaching in an empty lecture hall. So he had an interesting solution.

"Welcome to the first lecture where there are absolutely no living students in the room", Tim says to the camera. "But," he continues, "we did manage to get a small studio audience." Saying this, he turns around the video camera to reveal 4 seats, one behind the other, occupied by none other than the four Teletubbies- Tinky-Winky, Dipsy, Laa Laa and Po (from left to right). "Today's quiz question is which Teletubby is your favourite."

The online audience were not expecting that but appreciated Tim's creativity. The poll showed Laa Laa was the favourite member of the audience and 16% of those who voted didn't know who the Teletubbies were.

- Thanvi



Corona, but not Corona....

Everyone has been talking a lot about Corona recently but what's so interesting about that particular brand of beer? Maybe it's because they implemented a program to clean up plastic on Australian coastline. So far they managed to clean 490,000 sq meters of land and repurposed the plastic to make shirts and dresses. [1] This level of waste reduction by Corona definitely deserves the 24/7 news coverage.

Wait, it's not about the beer? Then it must be about the Corona Software Development Kit (SDK). A free platform where you can create your own apps and games? [2]

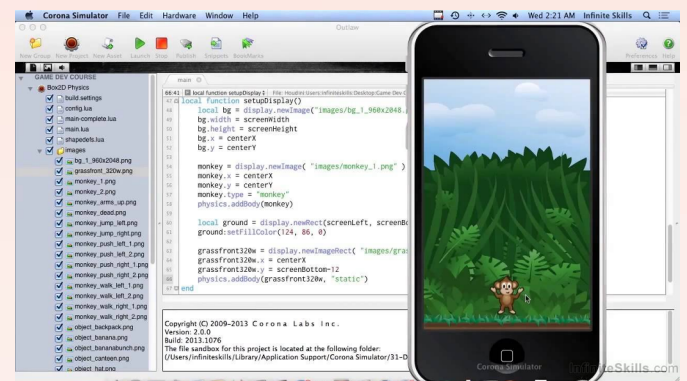
[1]"Corona Australia", Corona Australia, 2020. [Online]. Available: <https://www.coronaextra.com.au/>. [Accessed: 28- Mar- 2020].

[2]"Corona Documentation — API Reference | Libraries | physics", Docs.coronalabs.com, 2020. [Online]. Available: <https://docs.coronalabs.com/api/library/physics/index.html>. [Accessed: 28- Mar- 2020].

[3]"11 Amazing Corona SDK Games | Redbytes Software", Redbytes: Custom Mobile Application Development Company [iOS, Android, Windows], 2020. [Online]. Available: <https://www.redbytes.in/11-amazing-games-developed-using-corona-sdk/>. [Accessed: 28-Mar- 2020].

What's not to love! Games like 'I Love Hue', 'Zip Zap' and 'Draw Rider' were created using Corona and the latter two use the in-built Box2D physics engine to simulate simple principles such as momentum and torque to keep their players hooked. [3]

Wait, all this buzz is not even about the SDK? It must be the Sun's Corona then.



Mobile Game Development with Corona SDK | Setting Up Your Physics World. youtube.com: O'Reilly-Video Training 2013.

- Thanvi

The Entropy-Gate Conspiracy

Entropy is a redundant 19th-century idea in desperate need of revision.

The phraseology "state of a system with some probability" is congruent with both quantum mechanics and thermodynamics since both describe states of systems that act "randomly".

However, thermodynamics for some suspicious 19th-Century-reason differs in its mathematics where "partition functions" are used in place of "wave functions" to describe states with assigned probabilities - the underlying sentiment, however, is clearly identical.

The further one journeys into their physics education the more it becomes apparent that "statistical mechanics" is merely a conspiratorial cover-up done by Big Relativity to gate-keep the quantum physicists from rightly applying their mathematical description of quantum events to all naturally probabilistic macro-phenomena, thereby instantly unifying the quantum and macroscopic worlds.

So, why the conspiracy? You see, as long as physics remains "incomplete" there will forever be an artificial need to create the "next generation of physicists", all done in the interest of hoarding the physics degree profits, of course!

- Vish

Prof. Possum

If you weren't a physicist what would you be?

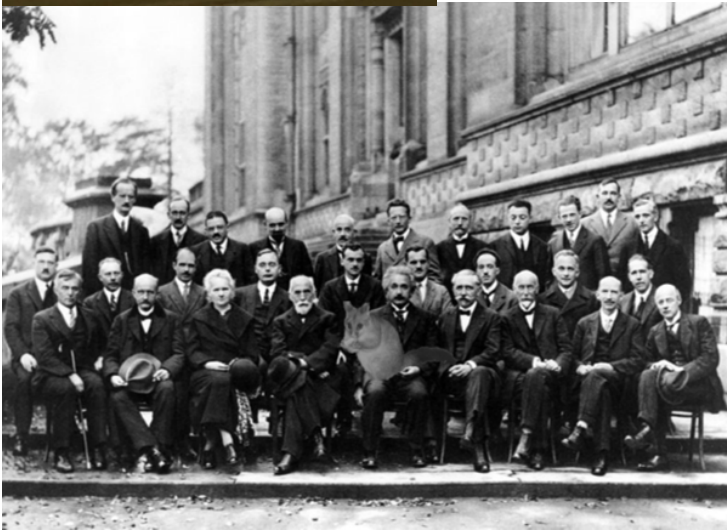
A dancer, I've learnt from the best - the hand-waving physics lecturers.

Who is your celebrity look alike?

Rocket from the Guardians of the Galaxy.

What physicist do you quote the most?

Sheldon Cooper of course!



What's the most famous physicist you've met?

I'm bound to secrecy through non-disclosure agreements but what I can tell you is my third cousin 14 times removed went to the Solvay Conference, she agreed with Einstein's hidden variable model for spin, after all possums are often the hidden factor when food disappears.

How did you end up in the physics building?

This will be a shock but I'm actually a professor in arts, after I finished my undergrad I wasn't sure what to do in the big world, so I did a few more years study and got my masters. After that, I realised I didn't actually want to sell my soul to a finance company, so I went and got a PhD. Then I just decided industry was scary and I could keep studying forever, so I went into STEM, I've heard how many times the fire alarms go off in engineering and know the stories about what happens to animals in biology so physics it is.

Why lecture Room 405?

I don't know what room 405 is.

LT1, why do you like lecture theatre 1?

In winter that lecture theatre is up high enough to remain warm, but not so stuffy it smells. In summer, it's directly in the path of a cross breeze from the windows. Just like how Sheldon likes his couch in The Big Bang Theory.

Why have you now left USYD?

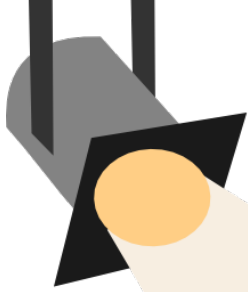
After watching too many babies being thrown out with the bathwater in undergrad classes, I decided it was time to graduate from another degree. Leaving uni still seems scary so I think I might do some more physics and get another degree and then do some research (something bigger than an SSP project). I've been leaping across a physics room when really I want to make a leap for mankind in physics.

- Sam

Top left: Sarah

Right: Marvel Studios

Possum: Pesky Possum Control. 2018. The Life Of The Australian Brushtail Possum. [online] Available at: <https://www.peskypossum.com.au/the-life-of-the-australian-brushtail-possum/>



How to look

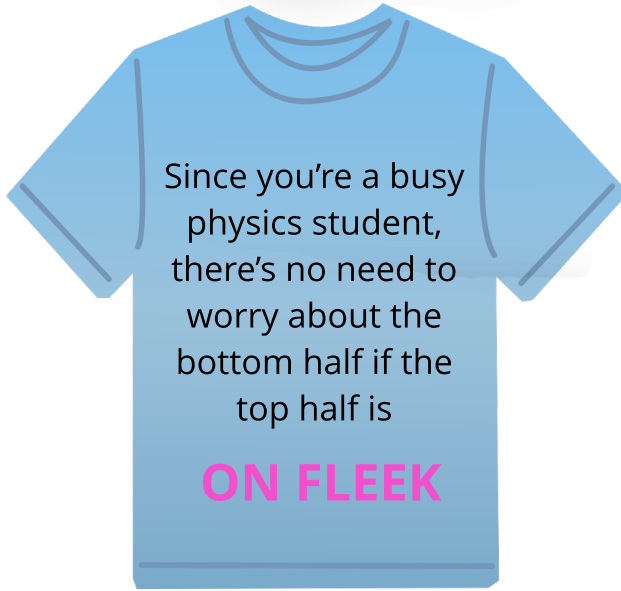
FABULOUS

while Zooming

Honey, lighting is **EVERYTHING!** Some of the 3.8×10^{26} Joules of energy per second that the sun outputs should be used to add some **SHINE** to your video.



If you can't stand those **HORRID** bags under your eyes, get a sleep in by wearing your most **FASHIONABLE** clothes to bed.



Since you're a busy physics student, there's no need to worry about the bottom half if the top half is

ON FLEEK



Forget about your Minecraft girlfriend/boyfriend! Increase your chances of finding your soulmate on Zoom by showing off your **ASSETS** (by that I mean your **CUTE** pets).



HOTTEST virtual backgrounds of April 2020: Toilet paper factory/warehouse, empty supermarket shelves, Elon Musk's space Tesla and a 1D infinite square well.



If you can't use the most **STYLISH** virtual backgrounds, show off your creative side by making a **DAZZLING** analogue background (a wall of hoarded toilet paper is **SO HOT** right now).

I can't wait to see your **MOST FABULOUS SELF** in our next Zoom **POWWOW!** Happy social distancing!

- Connor and Sarah