

JEREMY

SYDNEY UNIVERSITY PHYSICS SOCIETY / O-WEEK 2009 / OH JOY, WE'RE BACK

President's Welcome

Hi everyone (freshers, not-so-freshers...),

Welcome to 2009: Year of the Ox, the International Year of Astronomy, and another mad, great year at USyd, the Physoc way. We have lots planned this year, from the We Love First Years BBQ to card nights. 2009 promises to be a very exciting year for all of us interested in the more arcane aspects of our world, with the Large Hadron Collider poised to revolutionise our understanding of cosmology... oh, and yes, there will be free food.

So come and be part of the action, and may all four forces be with you.

Jessica Bloom,
El Prez

WELCOME TO UNIVERSITY

NOW SHUT UP AND READ THE RULES

- I. The School of Physics has a uniform. Wear it appropriately, and you're on your way. Beginners should immediately purchase a comfortable pair of sneakers, throw away any (non-surf company) name-brand clothing, buy some comfortable shorts, optionally a bike. Fulfilment of these criteria is acceptable as substitute credit for first-year classes.
- II. Socks and sandals may not be worn in combination by students - this highly practical ceremonial dress is a hard look to pull off, and is thus restricted to those who have earned a PhD.
- III. Seating becomes increasingly comfortable as you move up the pecking order. In first year, make do with the Buddhist meditation ritual that is the wooden benches of Slade lecture theatre. But stick around for a PhD, and you'll get your own comfy chair. Seven years well spent!
- IV. All students must leave at least one item of graffiti in Slade. But as university intake standards have lowered over the years, so has the quality of graffiti. Please reverse the trend.
- V. Minimise your exposure to sun for that authentic Physics building look!
- VI. Don Melrose is all powerful: to wit, a sample quote from a student: "Don Melrose - equation pirate of the seven astrophysical plasma seas". Genuflect at every opportunity.
- VII. In life, there are certain power structures which simply can't be conquered. The 1st year tutor/student relationship falls into this category. Laugh at their 'jokes', do whatever they ask - these people are on a power high. Remember, you need that attendance mark.
- VIII. Federation fellows are empowered by federal law to carry and use cattle prods as they see fit. Undergraduate students are particularly prized targets.
- IX. If you are an anointed one (TSP student), do your project in complex systems (one floor up, Physics annex building). New offices, air conditioning, and the finest signage money can buy.
- X. If you can figure out what the fences in the hallway on the second level are for, please write in to Jeremy - we have no idea, and it keeps us awake at night.

- H.D., F.L.

Colour! Back issues! <http://www.physics.usyd.edu.au/physoc/jeremy/>

BBQ March 5th

SAUSAGEFEST: Chow down on some quality snags while meeting your New Uni Friends. As it says on the label, "contains 70% meat".



MEET THE TEAM: Find out who to nag to get more barbecues, with our hard-hitting incisive and insightful collage of Physoc's executive for 2009. Page 2.



A PICCOLO DECAF SKINNY SOY LATTE WITH SWEETENER, THANKS: Six months in the making, the hotly anticipated first instalment of our brewspace exploration. Pages 3 and 4.

Ask Jeremy

Dear Jeremy,

I write to you as a heart-broken nerd. After a long, long awkward time as a virgin, I finally found the girl of my dreams.

We met on WOW, fell to chatting and found we lived in the same city! Our avatars jumped vigorously whenever we saw each other online, much as I can't in real life.

Then finally, we met up IRL at a net cafe. She was the buxom bespeckled goddess to my complete lack of musculature.

Things were in blissful hyperdrive until she met HIM - a computer programmer with even more chronic RSI than I. Suddenly I wasn't geek enough for her, my eyesight was too good, I was accused of 'jock-like' tendencies like enjoying the sunshine.

Now it's over and I wake each night after dreaming of them getting intimate singing Tom Lehrer songs together. How can I win her 'jolly' heart back? Help, Jeremy!

Yours,
Bulging right arm

Dear Mr. Arm,
Try serenading her with some Stanislaw Lem:

*Come, every frustum longs to be a cone,
And every vector dreams of matrices.
Hark to the gentle gradient of the breeze:
It whispers of a more ergodic zone.*

Let us know how it goes!

Cheers,
Jeremy.

Puzzled about etiquette? Bamboozled by social interaction? Ask Jeremy! Email him at jeremy@physics.usyd.edu.au

LETTERS

Letter to the Jeremy:

I just wrote in to thank the cleaners for leaving a subtle hint to the perpetrator(s) of the 2π solid-angle faecal explosion [Shouldn't that be a 2π liquid angle? -Ed] that left a cubicle out of order over the summer months.

Sincerely,
The Scatologist



Want to get something off your chest? Is there someone you need to slander in a public forum? Write to Jeremy! Email him at jeremy@physics.usyd.edu.au

MEET THE TEAM: PHYSOC EXEC 2009



Jessica's interests are life, the universe, and window shopping at Dior. She has her Facebook language set to 'Pirate'. Nuff said?

— Jessica Bloom
El Prez



Sahand likes to combine his two passions, cooking and drumming, into a single pastime.

— Sahand Mahmoodian
Jeremy Editor



Silvy just completed her Honours (yay!). She seeks full time work, and while waiting, she plays housewife - making pizzas and doing laundry.

— Silvy Choi
Webmaster



Anthony is a British theoretical physicist, who wrote the runaway best-seller "A Brief History of Time". No, wait, that's Stephen Hawking.

— Anthony Cheetham
VP



Felix lives in constant fear of the deadline.

— Felix Lawrence
Jeremy Editor



Stephen is a self-plagiariser who sent in the same blurb as last year, so for further details please refer to last year's O-week issue.

— Stephen Kennedy
Treasurer

A Traveller's Guide to Brewspace: A Review of Coffee In and Around The School of Physics

IN THIS TWO PART SERIES, WE SEARCH FOR THE BEST COFFEE EXPERIENCE NEAR THE SCHOOL OF PHYSICS. IN THIS INSTALMENT, WE FEATURE A ROUND-UP OF SIX COFFEE RETAILERS AND FOCUS SPECIFICALLY ON THE CAPPUCCINO AND THE ESPRESSO.

In order to investigate coffee phenomena we needed to find capable judges who intimately knew their coffee, and at the same time were fiercely independent. Our first judge, B.F., was found sitting in his complex systems office fidgeting nervously and foaming at the mouth. We asked him if he needed medical help, but he simply remarked that he enjoyed the taste of cappuccino froth and couldn't go a second without it. Our second judge, S.D., is a PhD student who normally has a quiet and calm demeanour, that is, until he is served a bad espresso... Although we were terrified of his possible reactions to some of the worse coffee we would be served, we thought that his Dr. Jekyll and Mr. Hyde personality would add some interest to our exploration of brewspace.

You might be thinking how a rigorous physics journal such as the *Jeremy* can treat this kind of study without descending into a cesspool of arrogant nonsense of the kind one would expect from an arts faculty publication. This is a thought worthy of pondering - of course, however, we have a rigorous method for our study. Each coffee experience is treated as a vector in brewspace. We project each vector on an orthogonal basis set $[\hat{e}_1, \hat{e}_2, \hat{e}_3]$. The first component $\hat{e}_1$ is *ambience*, essentially the vibe and atmosphere of the surroundings. The second, $\hat{e}_2$, is *foreplay*, reflecting the quality of

service and the appearance and smell of the coffee. Finally, the third component, $\hat{e}_3$, is *orally stimulated and associated sensations*, or in the language of the uninitiated, the taste. One can take the norm of the coffee experience vector under some metric to produce a scalar quantity reflecting the coffee experience as a whole.

The first retailer we set our judges loose upon was **Macro's Wholefoods Market** located at 146 King St about 900m away from the School of Physics. Take it away, Mr. Cappuccino:

B.F.: Macro's has a comforting hippie feel: the beetroot chips on the counter (and the demographic they attract) are a definite plus. There is a clean and fresh vegan Newtown vibe, although the soft pop music is a little annoying and out of place. Slightly cold service at the counter, but the attractive, organic smile at the table made up for it. Cappuccino looks good and smells ok. Simple presentation in a clean white cup. The milk dominates the oral experience, which is a shame. Slightly cold and too uniform. Not bad: your average cup of coffee.

S.D.: This being our first review, I entered Macro with an open mind - this wasn't my first visit here and I had never been let down before. The service was friendly, but slow, and while waiting for my coffee I decided to take in the Macro ambience. It quickly dawned on me that I hated the place: the pervasive odour of dried legumes, the oppressive greenness of the decor, the twee alternative music, the word "Organic" splashed on every free surface and the gaunt husks that constituted the rest of the clientele, all deeply engrossed in their laptops and lentil stew. Despite these glaring shortcomings in the ambience department, the coffee turned out alright. The demitasse cup in which the espresso was served was a bit large - which often implies an overly diluted coffee. A crema was visible on top and it smelled delicious. Unfortunately the coffee wasn't up to scratch in the flavour department, tasting thin and a bit bitter. The final score was nudged up because the coffee had a nice creamy texture, but sadly it had no taste.

Next up was the **School of Physics tearoom**. Here, our pride was on the line...

B.F.: The tearoom is unpretentious, honest, homely, and comfortable. Its aesthetic wonders include the pastel chairs and abundance of nerdy magazines and theses. When we visited it was quiet and empty post-research bite, but it usually has a vibe that rivals even the most hardcore of Kings Cross nightclubs. Lack of service was a big negative - washing up and cleaning up - what am I, an academic, or something? Someone serve me, dammit! Dirty mug is as bad as the freedom of mug choice is good. Free biscuits are great (grinding a chocolate biscuit into the mug ended up being a great substitute for chocolate powder on my capp.). The coffee itself was flat, dull, and unenjoyable. Shit accumulated at the bottom makes it a struggle to finish. The sublime Monte Carlo biscuit can't even save it.

S.D.: There are few venues which can match the Physics Tea Room in the ambience department. From the comfortable seating to the engaging and freely available reading material, the tea room has all bases covered. On top of these material considerations, the room has a welcoming and friendly vibe, particularly during the rush hour from 11:00 to 12:00, when free biscuits and tea are provided. The service was fantastic, a strictly DIY affair. After paying my fifty cents, I stepped up to the espresso machine and pressed the "small coffee" button. The machine made a series of load noises, including a reassuring grinding sound, before a tiny volume of liquid dribbled into my mug. First impressions were not positive: the coffee smelled like acetone, looked like lighter fluid and the mug was cold (entirely my fault). Things got worse when I made a first attempt at drinking the coffee, as the sensation was not dissimilar to licking a car tyre. I then added two teaspoonfuls of sugar. The sugar made it worse, but I swallowed it all after a bit of dry retching. It was lukewarm.

And then to **Donut King**, located on level three in the Wentworth Building...

B.F.: Donut King's loud and noisy colour scheme makes it a global minimum in cool space. Blue lino chairs are uncomfortable and the constant feeling of embarrassment for sitting in this environment in the middle of Wentworth is immense. Presentation is

continued on page 4

consistent with the enviable Donut King colour scheme. The coffee has negligible aroma. Foam is thick and chocolate sparse. The textbook 'have here' mistake is made: the cup is too big, diluting the coffee flavour that any serious cappuccino connoisseur seeks. It's too dilute to enjoy, but a reasonable taste for on-campus coffee.

S.D.: The dark horse of the review, Donut King is located on the main thoroughfare of the Wentworth building. This meant that the surroundings were noisy, the air was humid and the lighting was harsh. The decor was modelled on a 1950's diner with a bit of psychedelia thrown in for good measure. I quite liked the gigantic rainbow-hued donuts that were sprawled across the neon adorned walls. The service was friendly and quick. The baristas whipped up a decent looking espresso in under two minutes, served in a slightly worn demitasse cup. The coffee had a muted coffee smell, without the acrid bitter smell encountered in previous reviews. There wasn't much crema on top of the coffee, but it was warm to the touch and presented relatively well. The coffee was bland, but quite palatable; the texture thin and watery. The taste became more bitter as I reached the bottom of the cup and I was left with only a vague hint of bitterness as an aftertaste. Surprisingly, Donut King has the best tasting espresso on campus.

Azzuri's Café is hidden away on the first floor of the Wentworth building.

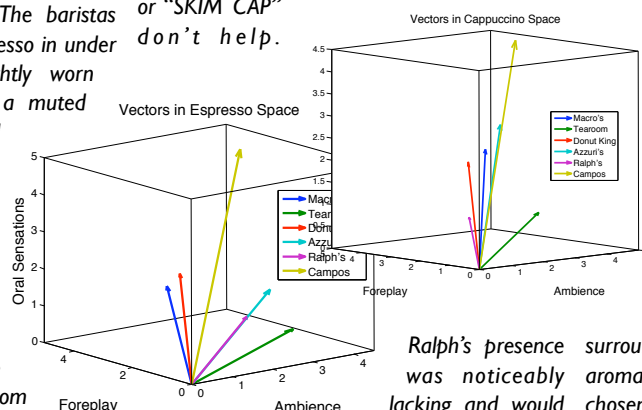
B.F.: I love Azzuri's! Sentimental for me: I spent pretty much every pre-exam period here throughout my undergrad years. The cool student vibe, nice artworks, comfy couches, and great music make this the best ambience on campus. Attaching your name to your order makes it a little more personal, and the aroma is immediately felt. Nice chocolaty infusion: great temperature and good coffee taste. Again they tend to fall for making the coffee big and milky, and this one is slightly sour at the bottom. Still, a good coffee.

S.D.: Azzuri's is tucked away on the bottom floor of Wentworth and is highly regarded for it's stylish decor, solid coffee and reasonable prices. On the day we did our review the café was a bit deserted, which was great because we grabbed the comfiest couches in the room. The background music was inoffensive and the walls featured some nice prints which added to the already considerable ambience at the back of the cafe. The service was quick and efficient and the coffee was served in a standard demitasse cup. Unfortunately, the coffee smelled acrid and didn't have a nice crema on top. It had the right creamy texture for an

espresso, but tasted very bitter. Once again, I couldn't taste any coffee in the drink, so I assume they must have been using old coffee beans. On the whole I was left feeling a bit disappointed with Azzuri's. It gets most of the surface aspects of the café experience right - all that was missing was the coffee.

Our penultimate adventure was at **Ralph's Café**, just adjacent to the School of Physics facing the oval.

B.F.: There was terrible radio music and American football on tv in this unpretentious undergrad vibe joint. Garish fluoro posters crowd the place and incessant shouting of "FLAT WHOITE" or "SKIM CAP" don't help.



somewhat. Love heart coffee art is nice, and service is usually reasonably friendly. The standing wait for coffee is not ideal. My coffee had negligible aroma and boring cups. Very watered down ('have here' size is way too big). Bland, weak taste makes this need sugar to enjoy. Ralphs can be decent, but this is an unbathed dog of a coffee.

S.D.: An institution amongst physics coffee aficionados, Ralph's cafe has a nice laid-back vibe, casual and defiantly unpretentious. The eating was comfortable and the room was well lit, with a nice view of the field behind Manning. There were a few faults: the tacky linoleum flooring, an ugly stack of vending machines next to the counter and terrible background music, but on the whole the ambience was pretty good. The coffee itself felt a bit cool to touch and the crema on top was very sparse. It was served in strange wide brimmed cup, which unfortunately made it easier to smell. Unfortunate, because the coffee smelled like bitumen, the flavour was unnaturally bitter and left a strangely pungent aftertaste in my mouth. I wasn't sure what the taste reminded me of, but after some discussion with the other reviewers we finally figured it out. Ralph's espressos taste like burnt pork crackling.

Finally, we made our way to **Campos** café, located at 193 Missenden Rd

about 900m from the School of Physics

B.F.: A dose of brilliant bop jazz immediately infuses itself into the soul of all who enter. Amazing black and white photos, wooden floors, chairs and tables, clinging of cups, warm chatter, and with sunlight peering through the windows: homely and stylish at once. Campos defines the coffee ambience. Small wait for the table, but service is warm and friendly, and the coffee has both aroma and art to be savoured. Perfect temperature, and great cups and saucers. The handles on the new cups can be a little difficult to hold. Great foam and brilliant coffee taste: not too bitter, but with depth and subtlety. Could be a little stronger - a little weak towards the bottom this time - but an inspiring coffee was had nonetheless.

S.D.: To describe Campos as being a mere cafe would be an understatement. To describe it as being a mere experience would be an injustice! No, Campos defies our attempts to shackle its essential perfection with such superlatives. First mention goes to the ambient surroundings - a harmonious union of the aroma of freshly ground coffee, tastefully chosen decor and jazz. Perfect. The service is friendly and quick, in spite of the often large number of customers. The presentation of the coffee is flawless, a nice demitasse cup with a thimble-full of dark, richly coloured espresso. The cup was warm and the coffee smelled delicious. Perfect. Finally, the tasting of the espresso, which actually warrants three reviews, due to there being three distinct layers of flavour as one drinks the espresso. Each of which was delicious. Perfect. Possibly the best coffee in Sydney.

After much deliberation our hyper-caffeinated judges gave us their coffee vectors. The results are in the table and are also plotted as vectors in brewspace.

	Cappuccino		Espresso	
Macro's	\$2.50	[3, 3, 2.5]	\$2.50	[1.5, 3, 2]
Tearoom	\$0.50	[3.5, 1.5, 1]	\$0.50	[5, 3, 0]
Donut King	\$2.60	[1, 1.5, 2.5]	\$2.40	[1.5, 2.5, 2.5]
Azzuri's	\$3.00	[4, 3.5, 3]	\$2.50	[4, 2.5, 1.5]
Ralph's	\$2.50	[1.5, 2, 1]	\$2.50	[3, 2, 1]
Campos	\$3.30	[5, 4, 4.5]	\$3.00	[5, 5, 5]

Stay tuned for the next issue where we round up our tour of brewspace with the mocha and the flat white. We also analyse metrics in brewspace and provide an answer to the all important question, "Whose vector is the longest of all?"

- S.M., B.F., S.D.