Astronomy Themed Beverages PART III

‘Good-bye’ Co-Learnium

Jimi Green | 23rd June

Definitions reminder!

What is a beverage (for the purposes of this talk):

Water + Malt + Hops + Yeast

What is Astronomy (for the purposes of this talk):

Astronomy, Physics, Electronics, Engineering, Science Fiction

I have to have tried them! (total 2180 different brews and counting)

Thinking

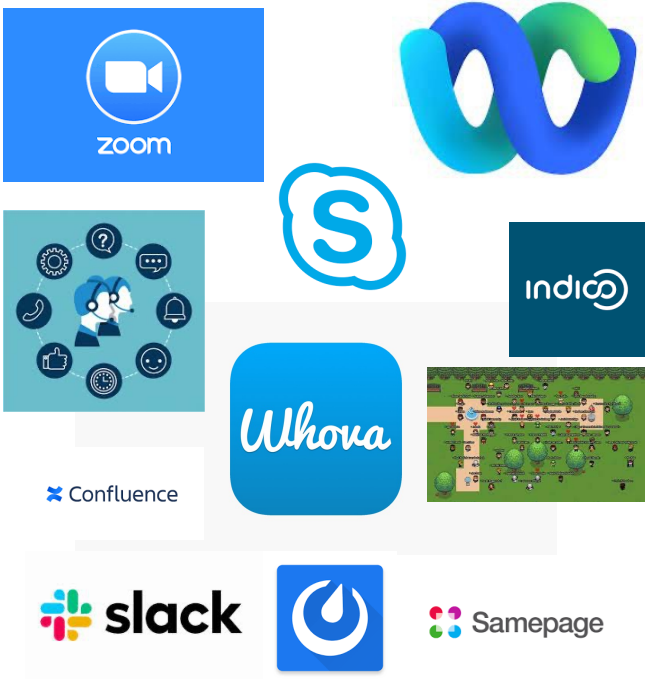
How to present a bunch of beers again and try and keep it interesting?

Part 2 of this ‘epic’ trilogy was presented in Nov 2019

What’s changed in this time?

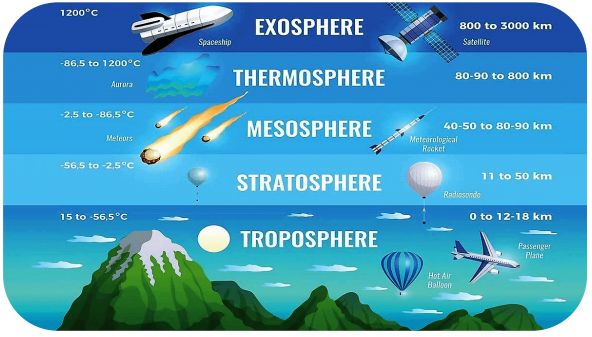
Global Pandemic

- Virtual & hybrid meetings..
- Online tools…
- ‘sorry cant find the mute button’
- Working from home…
- Cats, dogs, children, 1000s memes



Global Pandemic: less flights

- Atmospheric improvements from less flights!
- Innate Brewers Troposphere Pale Ale
- Pale Ale:
  - Pale malt
  - ‘hop-forward’ (= flavours out of balance towards the hops)
  - Moderate strength



Global Pandemic: lockdowns

Brown/dark malt
from 18th century London, popular with the street/river ‘porters’

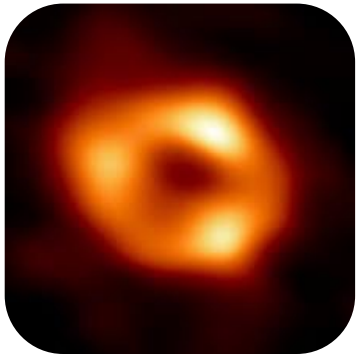
India Pale Ale
Typically hoppier than pale
Traditionally brewed stronger

Global Pandemic: mindsets

No Brown/dark malt of normal stout, instead flavours (coffee, cacao, vanilla)

Brewed with renewable energy!

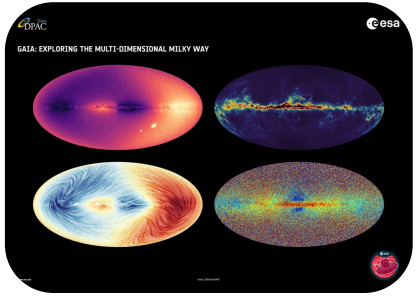
Knowledge of our Galaxy



Sgr A* via Event Horizon Telescope

Event Horizon Telescope

GAIA Data Release 3 – astrometric parallaxes for 1.46 billion sources



esa gaia

Knowledge of our Galaxy

Galaxy hops: Australian breed of hops with citrus, peach, passionfruit flavours

Sour style: intentional bacteria! (Lactobacillus, Pediococcus, Brettanomyces)

Space & Astronomy People

- Name changed, CASS -> S&A
- Various personnel changes

Space & Astronomy People

Moon

Red ale: pale ale with kilned malts (germinated barley heated to dry -> boost flavours) + roasted barley

Nowhereman X Luna Pale Ale

SPACE

Continued to grow in prominence

Got more crowded – more RFI to manage

James Webb Space Telescope Launched

(1st pics due 12th July!)

S&A space-craft tracking growing

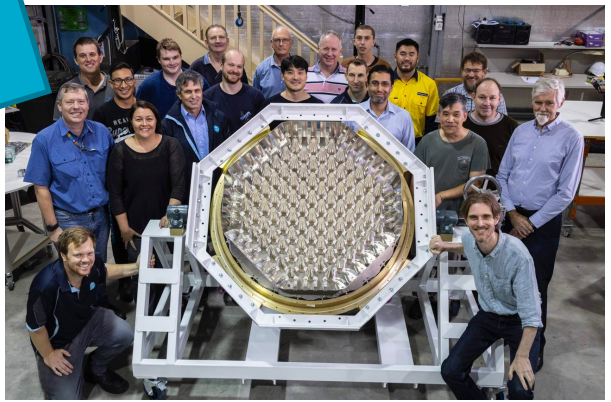
SPACE

Innate Brewers Space Juice
Double Hazy IPA

Amundsen Chuggernaut
New England IPA

ENGINEERING - CRYOGENICS

From uncooled to cooled
Phased Array Feeds!



Coming soon to a 64m radio telescope near you

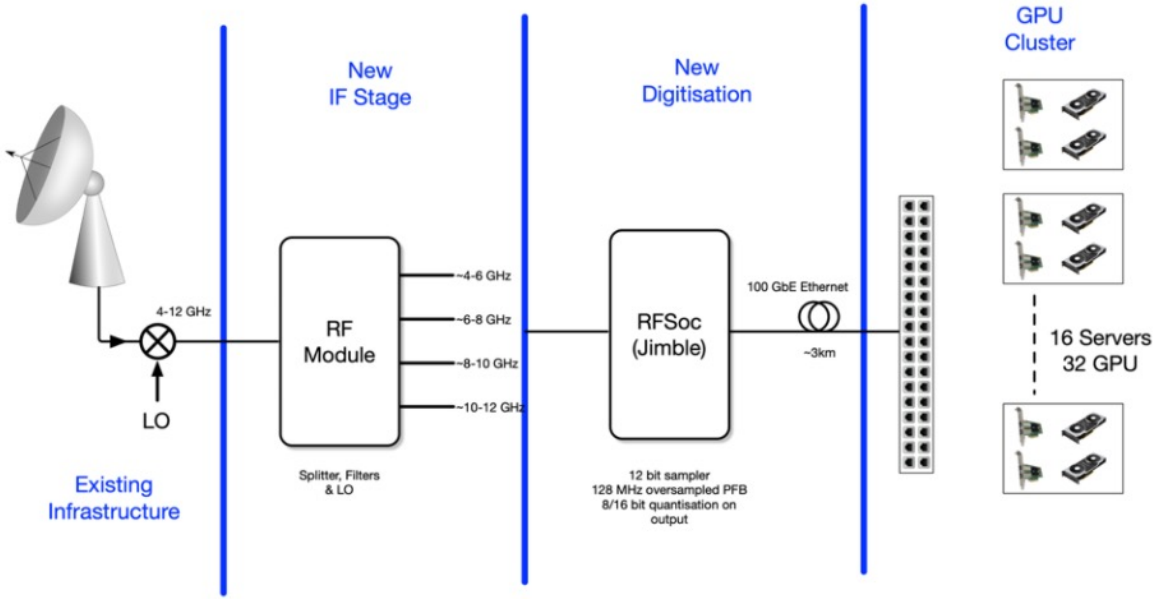
ENGINEERING - CRYOGENICS

- Cryo hops! – extract and peletise lupulins from hops
- Lupulins are flavourful yellow stuff within the green stuff of hops
- Net result cryo-hops = stronger more intense hop flavours

Engineering - BigCAT

Correlator upgrade for ATCA:

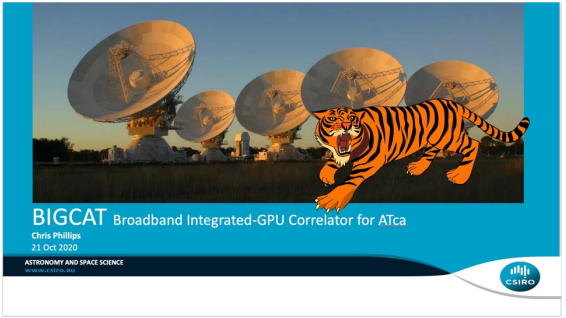
“Broadband Integrated GPU Correlator for ATCA Telescope”



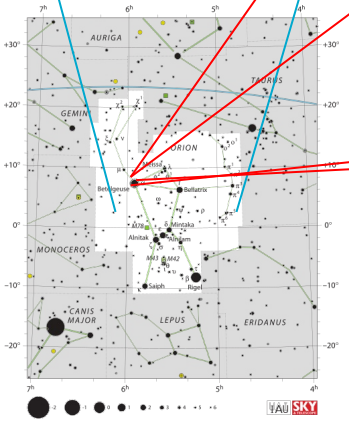
Engineering - BigCAT

Closest to ‘BigCAT’ could get..

- MASH Brewing ‘Red Cat’ Red IPA



‘Astrologers’ and Constellations

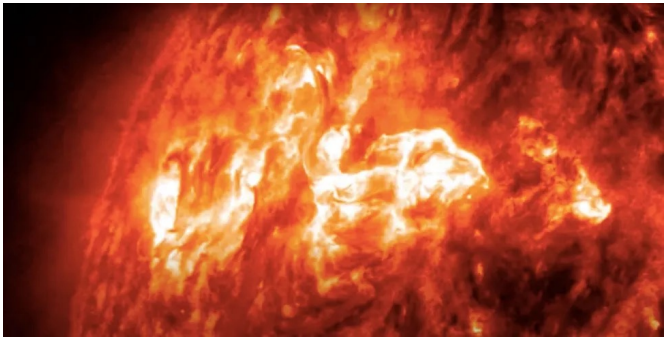


Kaiju Betelgeuse double red ale (10%)

Solar activity

Deeds X Sauce Brewing Collaborative Hazy Double IPA

- A stars photosphere – visible surface/deepest layer of the sun that we can see (below chromosphere) – sun spots and flares



- Heading for solar peak in 2025, coronal mass ejection on 13th June captured by NASA's Solar Dynamics

New Star Wars Entries!

The Mandalorian

The Book of Boba Fett

Obi Wan Kenobi

+ THE BAD BATCH, STAR WARS VISIONS, MORE CLONE WARS

New Star Wars Entries!

Nail Brewing Skywalker Golden IPA

Dainton Brewing ‘Darklord’ Imperial Stout

The Haze of Revan

Black NEIPA

..and, like George Lucas has been known to do, a Star Wars Edit !

Jedi Juice with Leia's hair buns became J-Juice without Leia's hair buns

Miscellaneous Extras!

Liverpool FC *almost* won a quadruple

Premier League ☹
Champions League ☹
FA Cup ☺
League Cup ☺

Quadruple/Quadrupel Beers!

Strong:
~9 -> ~14% abv

<- 4 times the hops IPA

Belgian style "Quadrupel" ->

Low- / Non- Alcoholic

Little Bang Brewery ‘Spacer’ Alcohol Free (<0.5%) American Pale Ale

- Addition of hops late in process gives full flavour without the alcohol
- Traditionally low/non-alc produced by heating off the alcohol – but this can dissipate flavours (yucky taste!)
- Now:
  - Steam distillation (lower temp in vacuum)
  - reverse osmosis (high pressure and membranes)
  - Water vapour/Gas stripping
  - restricted fermenting (via sugars or yeast strains)

Alcohol free is an option!

Where to next?