

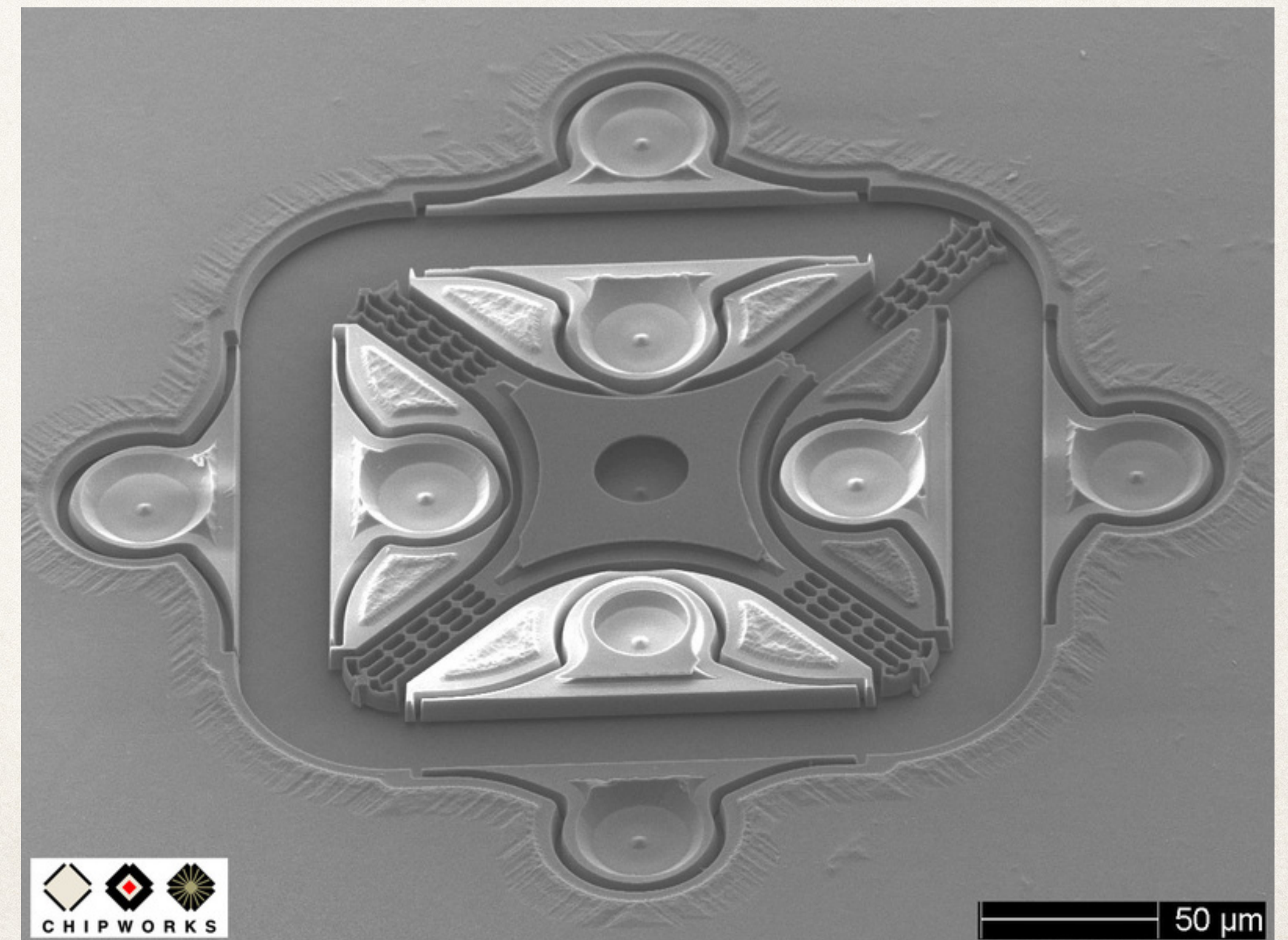
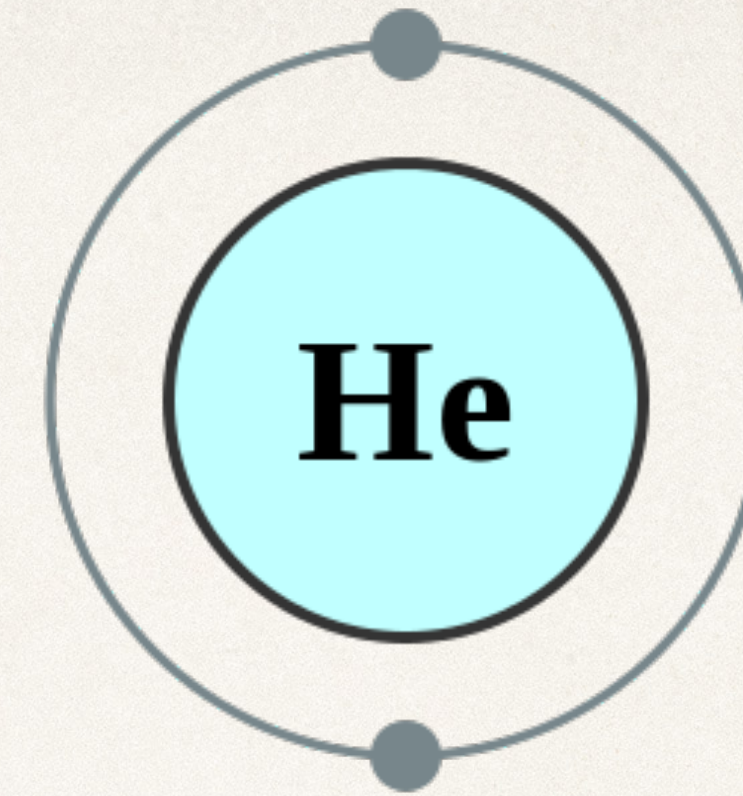
What's New?

Todd McDaniel, Mac Group, Client Platform Services, Marriott Library

November, 2018

Helium and iPhones don't mix.

- ❖ https://www.reddit.com/r/sysadmin/comments/9mk2o7/mri_disabled_every_ios_device_in_facility
- ❖ https://www.reddit.com/r/sysadmin/comments/9si6r9/postmortem_mri_disables_every_ios_device_in
- ❖ <https://ifixit.org/blog/11986/iphones-are-allergic-to-helium/>
- ❖ Large helium leak, possibly upset gyroscopes and/or clocks, oscillator



Fall Apple hardware event

iPad Pro

- ❖ FaceID
- ❖ Thinner bezels, Thinner cases
- ❖ USB-C
- ❖ 11" and 12.9", 64GB to 1TB
- ❖ New Pencil
- ❖ No home button or headphone jack...



MacBook Air

- ❖ i5, up to 16GB RAM, 1.5TB SSD
- ❖ Retina displays, 2560x1600, 48% more color
- ❖ No Touch Bar, but includes Touch ID
- ❖ Thinner bezels
- ❖ 2x Thunderbolt 3 (USB-C)
- ❖ T2



MacBook Pro w/Vega

- ❖ Discrete Radeon Pro Vega 16 and 20
- ❖ 4GB HBM2
- ❖ \$250, \$350 added cost
- ❖ BlackMagic eGPU with Radeon RX Pro Vega 56 GPU, \$1199



Mac Mini

- ❖ T2, up to 64GB RAM, 6-core i7, 2 TB SSD, 10Gb Ethernet
- ❖ CPU and SSD soldered to logic board. :(
- ❖ [https://www.ifixit.com/Guide/Mac+mini+Late+2018+Memory+\(RAM\)+Replacement/115309](https://www.ifixit.com/Guide/Mac+mini+Late+2018+Memory+(RAM)+Replacement/115309)
- ❖ <https://www.apple.com/newsroom/2018/10/the-secret-world-of-mac-mini/>



Side-channel Attacks

- ❖ https://en.wikipedia.org/wiki/Side-channel_attack
- ❖ *“...any attack based on information gained from the implementation of a computer system, rather than weaknesses in the implemented algorithm itself.”*
- ❖ Targets include: caches, timing, power, electromagnetic radiation, sound, error handling, data persistence, software-initiated faults and optically
- ❖ Spectre, Meltdown, Row Hammer, Van Eck phreaking, TEMPEST

PortSmash

- ❖ <https://arstechnica.com/information-technology/2018/11/intel-cpus-fall-to-new-hyperthreading-exploit-that-pilfers-crypto-keys/>
- ❖ <https://github.com/bbbrumley/portsmash>

Additional Spectre/Meltdown attacks announced

- ❖ <https://arstechnica.com/gadgets/2018/11/spectre-meltdown-researchers-unveil-7-more-speculative-execution-attacks/>

IBM acquires Red Hat for \$34 Billion

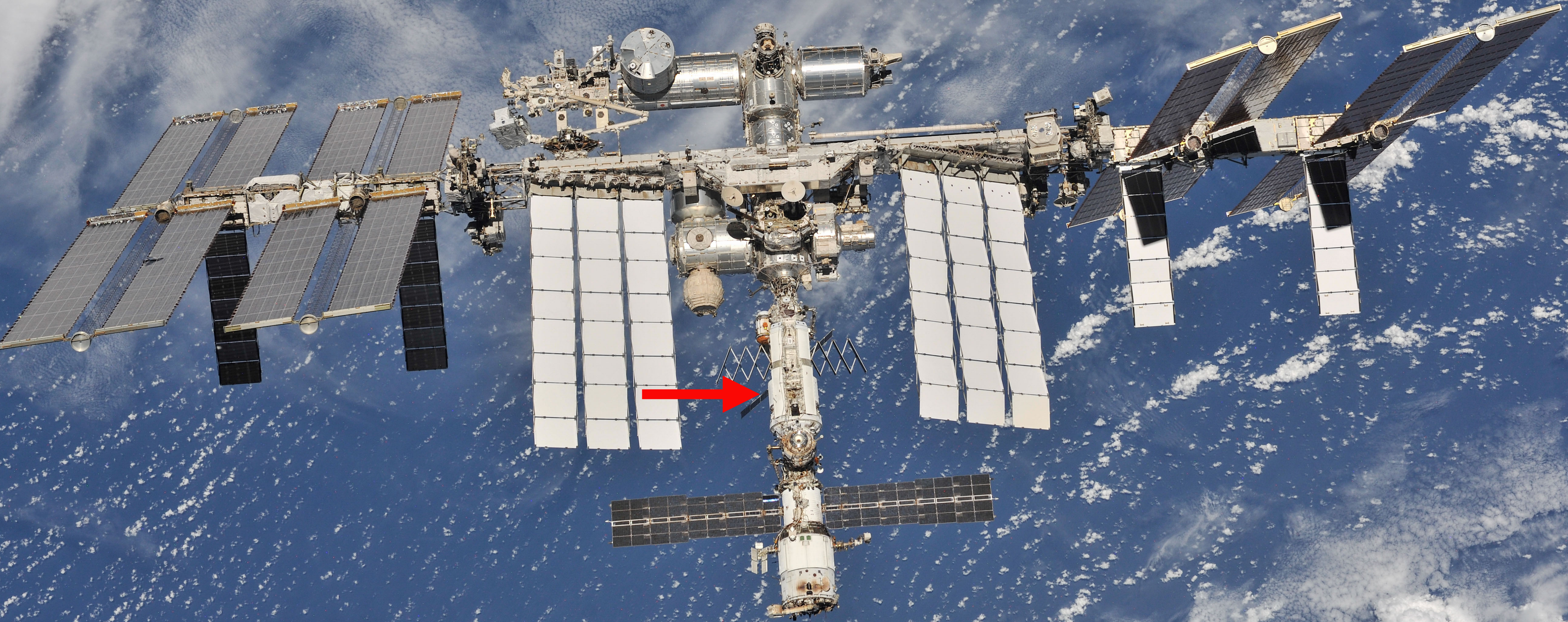
- ❖ “Red Hat to operate as a distinct unit within IBM's Hybrid Cloud team”
<https://newsroom.ibm.com/2018-10-28-IBM-To-Acquire-Red-Hat-Completely-Changing-The-Cloud-Landscape-And-Becoming-Worlds-1-Hybrid-Cloud-Provider>
- ❖ What will happen to RHEL, Fedora, etc...

Starman passes Mars

- ❖ <https://arstechnica.com/science/2018/11/elon-musks-tesla-roadster-reaches-its-furthest-point-from-the-sun/>
- ❖ <https://twitter.com/SpaceX/status/1058518183064219648/photo/1>



Happy 20th Birthday, ISS!



30th anniversary of the Morris Worm

- ❖ 11 / 02 / 88, ~6,000 machines infected, up to \$10M in damages
- ❖ <https://www.cyberscoop.com/morris-worm-mirai-scott-shackelford-indiana-university/>
- ❖ https://en.wikipedia.org/wiki/Morris_worm
- ❖ [A Tour of the Worm](#), Donn Seeley, University of Utah

Happy Thanksgiving!!!

