

Welcome to the 2019 **#HPATechRetreat**

which, thanks to everyone, is

Sold Out, Again!

these slides are already at
bit.ly/hpa2019-intro



Mark Your Calendars!

2020 HPA Tech Retreat

- Week of February 17 through 21, 2019
- moving: Westin Mission Hills, Palm Desert (been there before)
- Submit proposals as soon as you'd like; deadline will be in late October:
 - TVMark@EarthLink.Net or Media.Mark.Schubin@GMail.Com
 - if you don't hear from me, I probably haven't received your proposal



The Basics

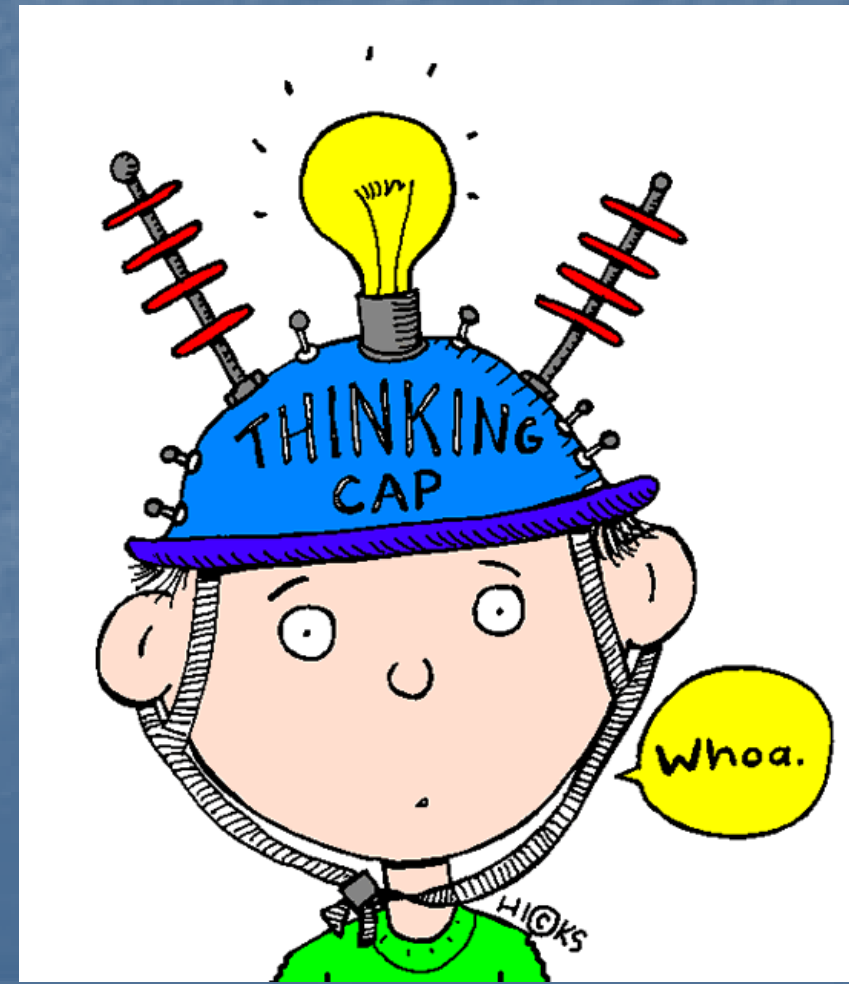


- The schedule **rules**
 - download the app or check online; there might have been changes
- Power available in all table rows, Wi-Fi in room
 - SSID: Marriott_CONFERENCE Password: hollywood19
- Innovation Zone open to 7:30 pm today, tomorrow 8:30 am to 2 pm
No Innovation Zone Friday
- All meals at the JW Pavillion
- Breakfast-roundtable topic lists will be physically posted
 - breakfast roundtables are Liberty Hall; if you don't like one, move
 - Friday slots still available; if you'd like to moderate one, please let me know

for the app
(also at HPA
Tech Retreat
registration)

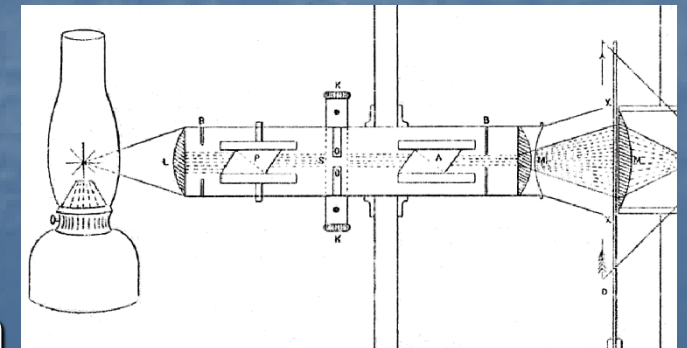
The Basics – Part II

- Quizzes:
 - all are eligible (except me); any research is ok; cheating is not possible (so go ahead & try)
 - answers *can* be found online (if you know where to look)
 - place entries in bowl by session end (quiz #5 by last refreshment break)
 - have name and quiz # on entry
 - no penalty for wrong answers
 - win at least a sticker or pin!



2019 Active Quizzes

- Quiz 0: According to this month's *IEEE Proceedings*, what element did the 1931 movie *Frankenstein* introduce to the story?
- Quiz 1: According to a recent post by one of their cinema-lens specialists, which has higher dynamic range and why: ARRI Signature Prime or ARRI Ultra Prime?
- Quiz 5: *If* it happened, could an 1870 proposal for a video camera have been viable? Explain.



from Sutton's 1890 viable publication

The Basics – Part III

- Speakers: Send presentations or give to Max for posting (optional)
- No recording please (except for personal use)
- Be nice!
 - computer sounds muted
 - communications devices on vibrate or silent
 - **ALL** calls and conversations outside the room
- WiFi: Again, SSID: Marriott_CONFERENCE, PW: hollywood19
- Please fill out evaluations
 - app or <https://hpaonline.com/form/2019-hpa-tech-retreat-survey/>
- Please vote on Innovation Zone Audience Award
 - app or <https://hpaonline.com/form/2019-innovation-zone-audience-award/>





2019 HPA Tech Re



HPA Tech Retreat 201

Five Days of Candid Conversations with Wo

Upcoming Events

- Women In Post - HPA Tech Retreat Lunch
- HPA Tech Retreat 2019
- NET March Lunch
- YEP NAB Meet-Up

Past Events

Program Presentations

Event Photo Galleries

password:
TR2019



The Technology Year in Review: Beyond Winky-Dink



66th Year of Interactive TV?

The New York Times

‘Black Mirror’ Gives Power to the People



How was
it done?

The New York Times

‘Black Mirror’ Gives Power to the People



The New York Times

‘Bandersnatch’ Has Many Paths, but Do Any of Them Add Up to Anything?



The New York Times

‘Black Mirror’ Gives Power to the People



The New York Times

‘Bandersnatch’ Has Many Paths, but Do Any of Them Add Up to Anything?



and what's with the color change?

15 SHARES



NOW READING

Virtual driver Enzo Bonito beats Formula E champion Luca di Grassi in one-on-one ...

Virtual driver Enzo Bonito beats Formula E champion Luca di Grassi in one-on-one real race; e-sports gamers are ecstatic

- The 23-year-old Italian defeated former F1 driver Di Grassi in Mexico's Race of Champions Nations Cup
- Virtual racers say it proves simulator drivers can make the step up to real race conditions

PUBLISHED : Wednesday, 23 January, 2019, 2:42pm

15 SHARES



NOW READING

Virtual driver Enzo Bonito beats Formula E champion Luca di Grassi in one-on-one ...

Virtual driver Enzo Bonito beats Formula E champion Luca di Grassi in one-on-one real race; e-sports gamers are ecstatic

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Is esports the only thing eating into Netflix audiences?

PUBLISHED : Wednesday, 23 January, 2019, 2:42pm



Netflix Says US Streaming Is Down 32 Percent vs Super Bowl LIII



"Apparently this Super Bowl thing is kind of a big deal," company tweets out around halftime

[Tony Maglio](#) | February 3, 2019 @ 6:05 PM

Last Updated: February 3, 2019 @ 7:12 PM



WITH BARS AND PARTIES IN THE MIX, SUPER BOWL AUDIENCE IMPROVES TO 112.7M VIEWERS

NFL snoozer is, maybe, the third-biggest broadcast in history

By Anthony Crupi. Published on February 08, 2019.

“Such is the state of ratings measurement that the game now stands as both the least-watched Super Bowl in 11 years [100.7M with streaming] and the third most-watched U.S. television event of all time.”

Nielsen: US live TV viewing up 16min in 6 months

August 23, 2018

**ADVANCED
TELEVISION**



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Share

The amount of time Americans spend with media continues to increase, largely the result of the widespread connectivity and available content platforms. In just the few months since the end



Super Bowl LIII set streaming records, while TV viewership saw massive drop



Sarah Perez @sarahintampa / 6 days ago

Comment

True, but:
“...the average minute audience of 2.6 million viewers during the game window was up over 31 percent year-over-year.”



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Whoops

Currently there is no content available for this page. Refresh page to retry.

[REFRESH PAGE](#)

Elements Console Sources Network Performance Memory Application Security Audits Ember

top Filter Default levels Group similar

⚠ [Deprecation] Styling master document from stylesheets defined in HTML Imports is deprecated. Please refer to <https://goo.gl/EGXzpw> for possible migration paths.

⚠ ▶ Could not find style data in module named iron-flex polymer.js:260

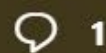
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❌ Failed to load resource: the server responded with a status of 500 () youtubei/v1/unplugge...YmjJZ5UG-D6Y-vkMc:1

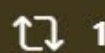
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Alex Virdee @alex_virdee · 21h

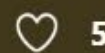
Great job for going down on us during the England match @YouTubeTV



1



1



5





The BBC iPlayer proved almost as popular as the England football team during the World Cup, but the tournament also revealed the current limits of online video for live events; now though the corporation's R&D team says it has solved the problem of delays when mass audiences watch live internet streams.



Fault! Prime draws fire for US Open coverage

**ADVANCED
TELEVISION**

August 29, 2018

Amazon Prime has been deluged with so many complaints about its coverage of the US Open that it has stopped viewers from posting anymore bad reviews.



The New York Times



Digital Divide Is Wider Than We Think, Study Says

Over all, Microsoft concluded that 162.8 million people do not use the internet at broadband speeds, while the F.C.C. says broadband is not available to 24.7 million Americans. The discrepancy is particularly stark in rural areas. In Ferry County, for example, Microsoft estimates that only 2 percent of people use broadband service, versus the 100 percent the federal government says have access to the service.

By Steve Lohr

Dec. 4, 2018



THE MEDIA PROFESSIONAL'S INSIDE PERSPECTIVE

Search

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CES 2019: Synamedia Offers AI Solution to Password Sharing

By Debra Kaufman

January 7, 2019

At CES 2019 this week, Synamedia will debut Credentials Sharing Insight, a service enabled by artificial intelligence to discover and halt password sharing, from the casual to the criminal. It's part of a growing trend among pay TV and streaming video services to curtail the use of shared passwords, especially among friends and family. Synamedia chief product officer Jean-Marc Racine noted that, "the way you secure OTT is evolving." Parks Associates estimates a loss of as much as \$9.9 billion due to password sharing by 2021.

Variety reports that, "previously, TV operators largely relied on secure devices, including locked-down set-top boxes and smart cards to decrypt satellite TV." But with the rise of streaming content, services designed sign-on solutions that were easy for consumers but also hard to control: "Most services have tried to curtail

GIZMODO

VIDEO REVIEW SCIENCE IO9 FIELD GUIDE EARTHER DESIGN PALEOFUTURE

NEWS

Crypto Exchange Says It Can't Repay \$190 Million to Clients After Founder Dies With Only Password



Tom McKay
Yesterday 6:50pm • Filed to: CRYPTO

442.1K 241 2



Super Bowl 2019: Measured Lag Behind Real-Time

Comparing various streaming sources with the on-field game



source: Phenix
via *TV Technology*

<https://www.tvtechnology.com/news/latency-plagues-super-bowl-video-streams-finds-pheni>

Conclusion: Viewers on all platforms are significantly delayed, leading to spoilers and a degraded user experience.

Editorial Board

Sports Betting Is Legal. Watch Out.

Punters are welcome in eight states and counting. Here's how to prevent a disaster.

By Editorial Board
January 20, 2019, 9:00 AM EST



DESIGN > NETWORKS

Wall Street Going Wireless in Bid for Ultra-Low Latency

There's growing interest in wireless as a way to get faster connectivity for financial customers conducting low-latency trading, a trend seen in announcements this week from 325 Hudson and Hudson Fiber Networks.

Jason Verge | May 07, 2013



CES 2019

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NEWS

VIDEO

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CARS

DEALS



PHONES

At CES 2019, 5G is even more of a confusing mess than ever

Commentary: Everyone's talking about 5G at the show, even if they can't agree on what 5G actually is.

BY ROGER CHENG | JANUARY 10, 2019 5:00 AM PST



CES 2019

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SIGN IN

5G WORD GAMES —

AT&T sued by Sprint, must defend decision to tell users that 4G is "5G E"

Sprint says AT&T's "5G E" campaign violates laws against false advertising.

JON BRODKIN - 2/8/2019, 2:52 PM



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https://www.eetimes.com/author.asp?section_id=36&doc_id=1334271#

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Infrastructure Focus Clouds Bull View on 6G

By Loring Wirbel, 02.07.19



2

In Memorium

- CeBIT
- GeoCities
- Google+
- Time Warner
- UltraViolet



Wednesday, August 29, 2018 | Stay Connected

ADVANCED TELEVISION

71% of US consumers plan to keep cord

August 28, 2018

New Cord Evolution research from GfK MRI shows that almost three-quarters (71 per cent) of all US consumers say they have cable, satellite, or telco TV service and have no plans to drop it. This includes the majority of the crucial 18-to-34 age group (58 per cent), as well as 69 per cent of people ages 35 to 49, and 80 per cent of those 50 and over.

similar from other sources

Tom Cruise Explains Why HDTV 'Motion Smoothing' Is Terrible, Urges Movie Fans to Disable It

By **TODD SPANGLER**



VARIETY

FILM TV MUSIC TECH GAMING THEATER R

HOME > DIGITAL > NEWS

DECEMBER 5, 2018 7:52AM PT

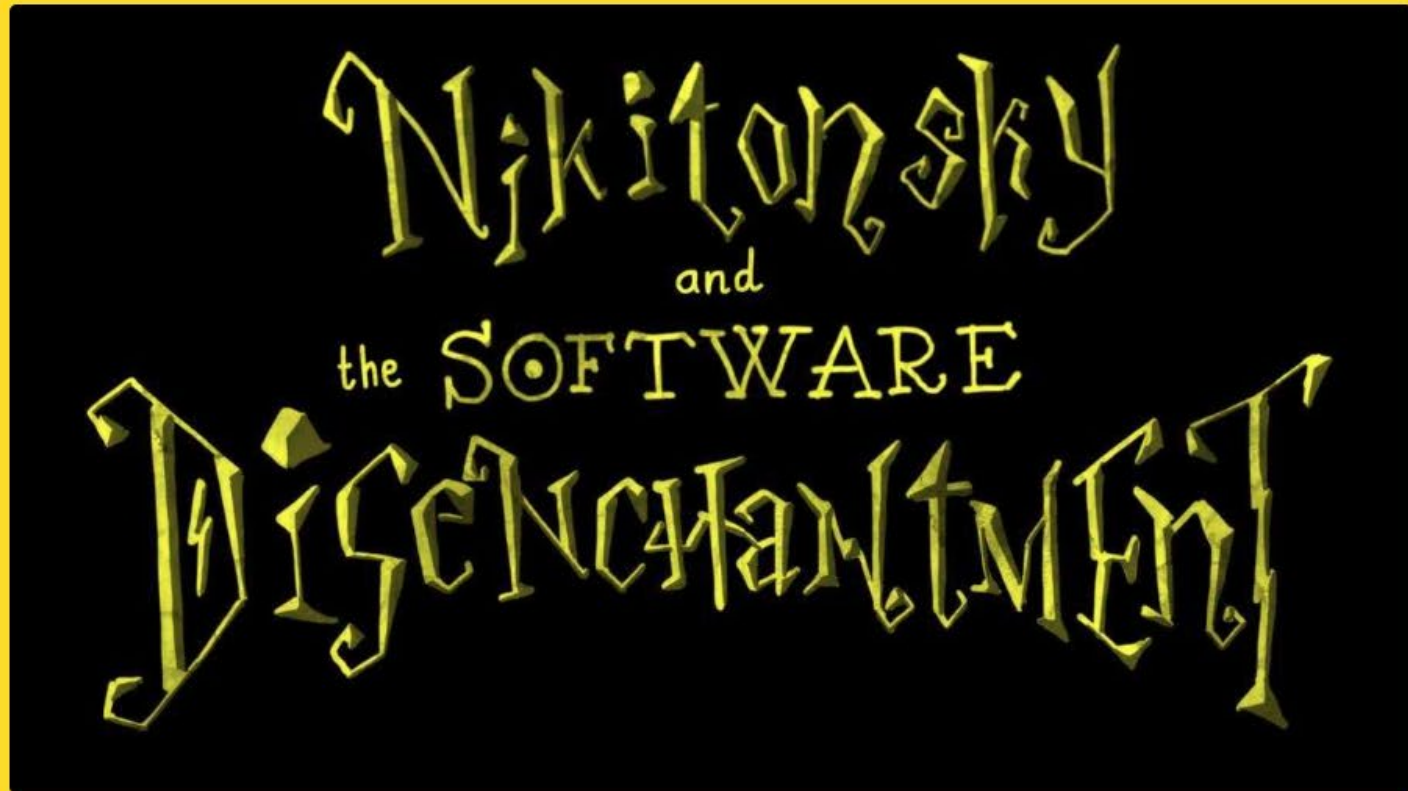
Tom Cruise Explains Why HDTV 'Motion Smoothing' Is Terrible, Urges Movie Fans to Disable It

By TODD SPANGLER



"Philips Natural Motion was the first! I saw it come into existence in the 90's, with the Melzonic and Falconic chips. It was and is very necessary, because frame repetition a.k.a. 2:2 or 3:2 pull-down, ditto for 50 -> 100 fps, is a terrible thing for motion portrayal. The only way to suppress it is with heavy motion blur from a long shutter speed. What we really need is (minimum) 120 fps from the camera to the display, and *then* I will switch off the interpolator."

Software disenchantment



Translations: [French](#) [Italian](#) [Portuguese](#) [Russian](#) [Spanish](#)

Google keyboard app routinely eats 150 Mb. Is an app that draws 30 keys on a screen really five times more complex than the whole Windows 95? Google app, which is basically just a package for Google Web Search, is 350 Mb! Google Play Services, which I do not use (I don't buy books, music or videos there)—300 Mb that just sit there and which I'm unable to delete.

tip of the hat to
Deborah McAdams
for calling this to
my attention



Login

At 10 trillion frames per second, this camera captures light in slow motion



Devin Coldewey @techcrunch / 4 months ago

tip of the hat to Deborah McAdams for calling this to my attention

Startups

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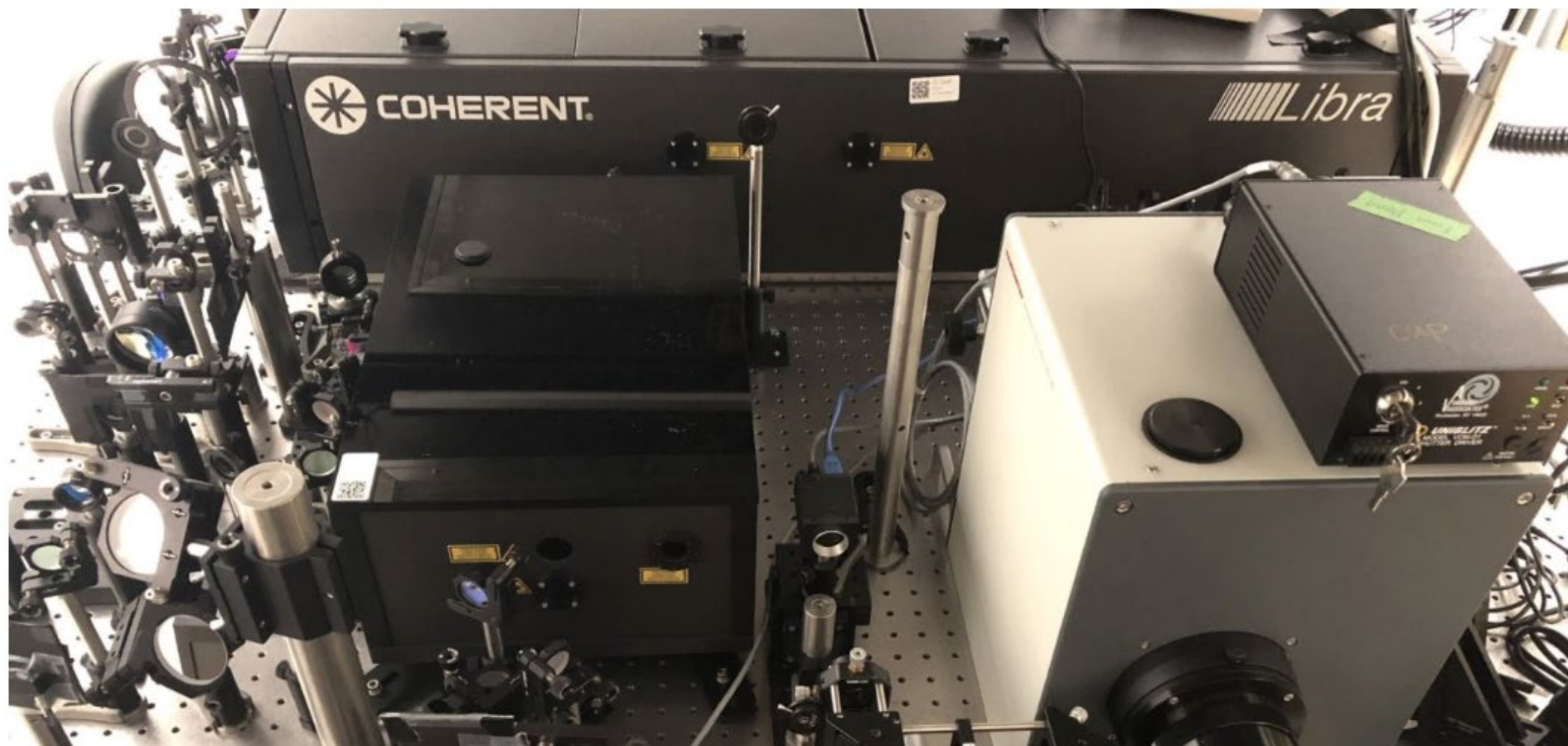
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Chemists discover how blue light speeds blindness

August 8, 2018, University of Toledo

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tip of the hat
to Ed Grogan
for calling this
to my attention



NEWS

China Blog



Movie madness: Why Chinese cinemas are empty but full

By Stephen McDonnell
BBC News, Beijing
🕒 31 August 2018

Then, if these publicly available figures appear to show that a film is doing well, people will buy shares in the companies which paid for the movie.

So a film might be on in the cinema and one of the companies which paid for it might buy out entire late night screenings. These will register as full houses when they are, in reality, entirely empty theatres.





Flying cinema has taken off in the UK - and the drones are delivering the popcorn

Cinema viewers were held in suspense - quite literally - in a screening that took place 100 feet in the air



Goodwood
Flying
School

Questions?

(if time allows)

these slides are already at
bit.ly/hpa2019-intro