



BRAIN Initiative has Tech connections

the WHITE HOUSE

**PRESIDENT OBAMA IS CALLING ON THE SCIENCE COMMUNITY
TO JOIN HIM IN PURSUING A GRAND CHALLENGE**

BRAIN INITIATIVE

BRAIN RESEARCH THROUGH ADVANCING INNOVATIVE NEUROTECHNOLOGIES



President Obama hopes to invigorate brain research and new neuroscience technology through the 100-million-dollar BRAIN Initiative. Numerous Caltech professors, such as Prof. Anderson and Prof. Adolphs, could benefit from the program.

- stanford.edu

AAKASH INDURKHYA
Contributing Writer

Earlier this month, President Obama proposed the Brain Research through Advancing Innovative Neurotechnologies Initiative (BRAIN Initiative), which

is a nationwide call for research leading to the mapping of all neurons in the human brain. This is no easy task – the human brain is possibly the most complex and sophisticated machine we know.

Aside from the obvious applications in medicine and neuroscience, the success of the BRAIN initiative will yield a revolution in computing and artificial intelligence; this project has the potential to link one of the hardest problems in biology to one of the

hardest problems in computer science.

Research at Caltech will no doubt play a lead role in the BRAIN initiative. In fact, Caltech's own David J. Anderson, Seymour Benzer Professor in Biology, is on the advisory board for the initiative.

At a high level, Professor Anderson investigates how emotional behavior is encoded in the brain.

More specifically, his group studies the neurons that make up neuronal circuits and how these circuits function. Recently,

Anderson collaborated with Caltech's Professor Pietro Perona, Allen E. Puckett Professor of Electrical Engineering, to use computer vision algorithms to study fear, aggression, and anxiety in flies. More information about the study can be found in Anderson's TEDxCaltech talk ([ted.com](#)).

Now the software and research developed at Caltech have been used around the world to study and map an even wider set of emotions.

Similarly, Professor Ralph Adolphs, who also presented at TEDxCaltech, focuses on

neurological processes caused by social interaction.

Particularly, Adolphs' group studies the changes in human behavior and function in neuronal circuits during and following social cognition.

The research is applicable to discerning changes in cognition as a result of brain damage or neuropsychiatric diseases. Recently, Adolphs has explored the information filters the brain uses during social interactions and the corresponding neuronal circuit's function. Adolphs also collaborates with several Caltech faculty members, including Antonio Rangel and Colin Camerer.

President Obama likened the BRAIN initiative to the successful Human Genome Project and Apollo Space program.

100 million dollars have been pledged to kick-start the project via NIH, NSF, and DARPA.

Current estimates show that the project will require 300 million dollars in funding per year to maintain steady progress.

Compared to the European Human Brain Project and China's Brainnetome, the US needs to speed-up and intensify research in neuronal mapping. However, a large portion of American neuro-research is related to the development of new tools and resources — the BRAIN initiative is an attempt to fill the gaps.

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Helping readers burst out of the Caltech bubble

Need to know

< **100** words about the world this week – topics sorted from good to bad

by *The Tech Eds*

Boston Marathon shoes	120 pairs of marathoners' shoes photographed for Boston magazine	[CNN]
Boy inducted into Mensa	5 -year old Gus Dorman joins Mensa (high IQ society) with IQ of 147	[ABC]
U.S. economy grows	2.5% increase due to strongest consumer spending in two years	[BBC]
New U.S. bill revealed	100 -dollar bill's new design revealed for fourth change in history	[CNN]
Officers shot in Italy	2 military officers wounded as new Italian government is sworn in	[NYT]
Bird flu spreads	1st case of H7N9 bird flu outside China reported in Taiwan	[BBC]
Large building collapses	362 people died in the collapse of an 8-story building in Bangladesh	[NYT]

Food with Mannion!

*Do you like eating food?
How about free food at nice restaurants?
Ever want to tell the world exactly what you think of said food?
The Tech will be beginning a new column to chronicle the foodie experiences of new writers every other week... The Catch: They'll be going head-to-head with Tom Mannion who will be reviewing the same restaurant. If you have ever thought you were more of a gourmand than our resident master chef, now's your chance to prove it!
Email us for a spot on the list at tech@caltech.edu*

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ASCIT Minutes

Minutes for April 22th, 2013. Taken by Allika Walvekar

Officers present: Diego Caporale, Pushpa Neppala, Mario Zubia, Michelle Tang, Allika Walvekar, Puikei Cheng, Connor Coley

Guests: Catherine Jamshidi, Zach Rivkin, Malvika Verma, Connor Rosen

Call to Order: 10:06pm

President's Report (Diego):

Leadership Conference took place on April 27th and despite the lack of participation, it went well. Next year we will need to make sure that there aren't many conflicts the day of. Please join us in congratulating the new BoD: Zach Rivkin, Malvika Verma, Connor Coley, Connie Hsueh, Monica Enlow, and Michelle Tang. The official transition between the new and old BoD will happen at the 7th week of term at a transition dinner.

Officer's Reports:

V.P. of Academic Affairs (ARC Chair: Pushpa):

The ARC is currently going through the nominations for ASCIT Teaching awards which will be held on Thursday May 23rd. Fall 2013 will feature a JPL pizza class so freshmen can receive exposure to types of JPL SURFs.

Pushpa is working with Betsy Mitchell and Cassandra to set up a survey about PE classes.

The Professor of the Month reception happened on April 25th for Gil Rafael, and it was very successful and well attended.

ESE is no longer an option for the next year, but there will still be ESE profs under GPS..

V.P. of Non-Academic Affairs (IHC Chair: Connor):

Sign ups for RevComm Chair, Interhouse Athman, Food Chair, Stewardship Chair were open last week until Monday at 5pm. Interviews will occur soon.

Affiliated room picks are happening over the next few weeks for all the houses.

Applications for Skurves to live in Ricketts is now closed. If you would like to appeal the decision of eligibility, please contact bweir@caltech.edu to set up a meeting with Dr. Anneila Sargent, Vice President for Student Affairs.

Director of Operations (Mario):

If you are a club that would like to be represented at future Club Fairs, then please submit the paperwork found at clubs.caltech.edu, so that you can be included.

Treasurer (Puikei):

Puikei secured additional funding for ASCIT Funding from the Alumni Association.

Puikei also met with incoming treasurer, Monica, to pass on records. She would like to remind everyone that the Take A Professor to Lunch program is still active. Feel free to email her with questions and requests.

Social Director (Michelle):

Finishing up logistics and payments for ASCIT Formal.

Upcoming Events: Blacker Interhouse (Week 4), Ruddock Frosh Party (Week 6), BFP (Week 8), Europarty (Week 9)

ASCIT Movie Night will probably be moved to a later date in the term so that students can choose between Iron Man 3 and Star Trek at the theater

Secretary (Allika):

Working on a Mental Health UCC page on Donut.

If anyone has any questions or concerns about a section of the minutes please email the appropriate officer. We are happy to answer any questions.

Meeting Adjourned: 11:15

Techerland: Prefrosh and the ‘Tech Door Code’

NINA BUDAeva

Staff Writer

Every Spring the tight community of Caltech undergoes a noticeable perturbation. The bubble of Techerland is put at risk of being pinched and possibly ruptured by a wave of young ambassadors from the outside world.

In April, hundreds of Prefrosh flock to campus for Prefrosh Weekend. They bring with them the aroma of high school hallways, scantron sheets, and high-ranked sports teams. The bright orange lanyards make them easy to spot, but the seasoned Techer can distinguish a Prefrosh even without this giveaway.

The Prefrosh, who rarely hide their excitement about being on the campus, divide into several categories. One extreme category mercilessly throws nerdy jokes around and likes to wear nerdy t-shirts and quote textbooks, which they likely do not fully understand. These Prefrosh often already know that they want to come here, or they are choosing between the standard package of Caltech, MIT, Harvard, etc.

Another extreme category seems bent on breaking the general campus wariness of outside visitors. Members of this category can be found nonchalantly sauntering around campus, intensely focused on being “cool.” They say they’re not sure if they want to go here or another school, where they might be able to play in Division I sports and have a broader “college experience.”

I’ve noticed a good number of current Techers get anxious about trying to prove to the ones coming fresh from the outside world that we are no less “normal” than what they see at their high schools or at other schools that they are visiting. I find this mind-boggling. Why should we try to mask our winning scientific quality just to put on the façade of a “normal college”? We are not a normal college, by definition!

The discerning Prefrosh visiting during Prefrosh Weekend can get a very good idea of what Caltech is like, hidden underneath the slip-n-slides and endless supply of donuts. Just like seasoned Techers can spot Prefrosh, the very discerning Prefrosh can tell who on the campus has spent a significant amount of time outside of the famous Caltech bubble. One telltale sign that someone has spent time outside is their behavior around doors. Techers have a very well developed door etiquette which is hard to find elsewhere and which I call the Techer Door Code.

Not every Techer exhibits this unique behavior, but the Door Code is prominent enough to be felt. The Techer exhibiting this behavior lives by the doctrine of getting through a door as quickly and efficiently as possible. To him, a door is an obstacle that must be passed through with minimal perturbation. This Techer has

developed a straightforward “approach and tackle” strategy for dealing with doors. The central doctrine lies in thinking of self first and foremost. The Techer sees the obstacle, approaches it, takes hold, opens the door, and barges through. If someone else already opened the door, then the Techer rejoices at this opportunity to save his own energy and marches through the door, ignoring anyone else who may be trying to do the same thing.

This Techer does not spare any energy to obey the wasteful conventions of the outside world. Intending to enter a building, why would this Techer ever let those exiting exit before he enters? What a silly notion! Holding doors? Why would he ever do that? This entails wasting his own time and energy on others who can fend for themselves.

Further, an observant Techer knows that holding doors can get him into all sorts of trouble: holding a door is the same as helping someone carry something, pulling a chair out for his companion, and doing any sort of favor or treating someone to something. This all implies that the Techer considers the one whom he is helping to be inferior and weaker. This Techer might even want to be courteous, but he would never risk putting himself in such a situation, especially after witnessing several offended rebellions from those being treated, and so this Techer keeps himself oblivious to common courtesy and etiquette. Ignorance is bliss, right?

I am describing a subset of Techers. There are those who keep themselves perfectly wholesome members of Techerland without adhering to the Techer Door Code. A very good place to observe Techer behavior around doors is outside of Chandler at noon. Sit at one of the umbrella tables for 15 minutes and you will see the difference between Door Code followers and non-followers.

The argument against “old fashioned” behavior seems to be popular with many people these days. This is indeed upsetting. Even if the idea of a male helping a female through a door is a vestige of older days, helping a less able person of any gender or age, should never go out of style. Several times, I’ve held the door open for a mother trying to get several kids and a stroller into Chandler. Clearly she did not have enough hands to do this alone, yet each time the mother was surprised and very grateful that I helped.



Members of the Class of 2014 smile for the camera as impressionable, excited pre-frosh.

- Courtesy of Bob Paz

Some current Techers are occupied with attracting more “normal” Prefrosh and yet they adhere to the Techer Door Code. If the Prefrosh themselves are the future Door Coders, they will not notice it.

However, if they are not of that category, then they will be quick to spot who on campus is putting on a show and who is not.

H o p e f u l l y neither group of Prefrosh will base their college decision on affinity for the Techer Door Code, but rather

that perhaps practicing a stricter form of etiquette and reverting to older rules might at least make it second nature to practice common courtesy.

on their desire to study science and engineering in an optimal environment. This is the decision that has kept Caltech being Caltech.



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Oblivion is a fun, but familiar, sci-fi ride

CAMERON ALLEN

Contributing Writer

Oblivion is a new science fiction film thick with twists and turns and beautiful special effects. Not wishing to delve into spoiler territory, I am going to stick to information that one could glean from the trailer. Aliens came to Earth and forced the humans to use nuclear weapons, which ended the war, but left Earth ravaged. Those who have not been killed by radiation sickness migrate to Titan, an inhabitable moon of Saturn. It requires a lot of energy to propel space stations and ships across the solar system, so a few are tasked with staying on Earth and making sure the energy plants run smoothly. Enter Jack Harper (Tom Cruise), a mechanic who repairs drones that monitor and maintain these plants.

Harper has dreams about a woman he has never met, but feels as though they are linked somehow. This may be explained by the fact that his memory was wiped for no adequate reason, but he is not sure. His curiosity and determination take him on a journey to discover exactly what is really happening on Earth. Eventually, the woman does turn up in his real life (again, this was in the trailer).

If this sounds familiar, it is because it is basically the plot of *Total Recall*, a 20-year-old film based on a 50-year-old short story. The differences are only cosmetic. Instead of being on Mars, they are on Earth. Harper is a mechanic rather than a construction worker, and instead of a fellow day laborer buddy aggressively telling him not to look for answers, there is a nagging companion. The mysteries of the unknown dream woman are the same. I could go on. But I will come back to this later.

Tom Cruise is an experienced actor, so we all know what he is capable of and what to expect. He reads his lines and plays the role well enough, but it is not difficult to imagine another actor playing his part; Cruise does not really get inside his character, like he has done for *Maverick*, or *Jerry Maguire*, or even *John Anderton* in *Minority Report*. He is getting pretty old, but even at 50, he shows that he can still be a terrific action hero through roles like this and Ethan Hunt in the recent *Ghost Protocol*. So I guess that is a positive. However, his character is pretty flat and has little development. Events occur in front of him, but he does not really react to them. He follows the trail of questions, but does not seem very invested in his revelations.

The rest of the cast is...fine. *Bond* girl Olga Kurylenko plays the mystery woman introduced in the very beginning, and she has a bit more depth than she showed in *Quantum*. She was probably my favorite character, as she was surprisingly easy to sympathize with. Andrea Riseborough, who plays Jack's stick-to-the-rules companion, is relatively stoic.



- www.imdb.com

Morgan Freeman briefly appears in an unnecessary subplot that serves only to convey information that Harper needs to continue. That guy who plays Jaime Lannister on *Game of Thrones* is in it for roughly 0.83 seconds, and has about six lines of dialogue, adding another throwaway role to his filmography. There is not much to say about the cast, as any of the roles could have been played by several other actors.

The visual design is probably the strongest suit of the film. The landscapes are sprawling and impressive, and really give a sense of isolation and abandonment. Juxtaposing these barren wastelands and ruined cities with the cleanliness and perfection of the futuristic homesteads and vehicles creates a sharp contrast of color and tone, and makes for a pretty immersive experience. Everything from after the war looks as clean, white, and sterile as an iProduct, reminiscent of the utopias depicted in *Logan's Run*, or the *Star Trek* television series. What? Joseph Kosinski's only other directorial project was *TRON: Legacy*? Well, I guess that makes sense then.

The main draw of *Oblivion* is the twists, to the point where the entire story is basically structured around them. Having one every 15 or 20 minutes makes the story absolutely bonkers by the end. The plot has more surprises than the classic children's book "M. Night Shyamalan Goes to the Dentist," and reads like an itemized list of science fiction clichés and tropes. However, at least Shyamalan shows restraint and discretion, putting maybe one big twist at the end of his

films. The sheer number of twists in *Oblivion* really devalues the shock of each one, and eventually all of the awe is gone from you. Most audiences will be able to see them coming, anyway, as none of them are original.

This is really the core problem of *Oblivion*. While the film is well made and looks fantastic, its content is (to put it nicely) derivative. I mentioned the similarities to *Total Recall*, and while that is the story it mimics the most, it pulls from many different sci-fi films from the last 50 years. There are points that smack of *2001: A Space Odyssey* (but without the Kubrick vision or charm), and others that feel like *Vanilla Sky*, or even *The Truman Show* if you look hard enough. Both

of you who have seen Tarkovsky's *Solaris* may recognize how its surreal tone influenced the dreamlike interactions between the characters, and Jack's own confusion as a result. Some people have compared this film to *The Matrix*, a pastiche movie if there ever was one. However, *The Matrix* both defined its own cyberpunk style and asked truly important philosophical questions. *Oblivion* is not quite that deep.

I know original science fiction is still possible; recent films like *Looper*, *Prometheus*, or *Moon* have proved that. So why is there not one single new idea in this film? Paying homage to a work that you respect is one thing, but when I can trace almost all of the plot points and twists of a film to other specific movies and books, I have to wonder...did no one at Universal raise their hand at the board meeting and ask "Didn't you steal this?" I like to think that after a wild late night of watching a *Twilight Zone* marathon, binging on the complete works of Philip K. Dick, and possibly eating expired yogurt, the screenwriter experienced a 124-minute fever dream, which, upon waking, he faithfully scribbled down on some nearby cocktail napkins.

Honestly, I really enjoyed watching this film, and rereading this review makes me feel as though I am being too harsh. The plot was at least engaging, and it was visually pleasing. But, there are very few moments or images that stood out, or have remained in my memory a day later. If you are jonesing for some sci-fi, you could certainly do worse. You probably will not see that compliment on the promotional posters, but I sincerely mean it. At its heart, *Oblivion* is a competent, inoffensive science fiction film that does not dare to be original or cerebral, preferring to mimic others instead of establishing its own identity. If you are a fan of science fiction, this should tide you over until *Star Trek* and *Elysium* come out. Since I would not consider this film to be a must-see for any particular demographic, *Oblivion* earns a hesitant recommendation, and a score of 7/10.

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From one gamer to another: Recognizing and fighting against addiction to gaming

DANA MATHEWS

Psychology Intern

So you stayed up all night increasing your stats in the new Call of Duty Black Ops II game and were late to class. Big deal, right? It happens.

On many occasions I missed classes entirely because I was relentlessly trying to dig up the pieces for a fossilized hatchling in World of Warcraft.

Occasional lateness and missing of classes is excusable and understandable, but sometimes it can get to a point where your friends and professors just look at you and say, "Really?" So how do we know when we or someone we know is at a point where their gaming habits are interfering with their life? For most of us that point is hard to recognize. So let's break this down a little to see if it looks like someone you know or even yourself:

- Falling behind on sets or lab work due to gaming
- Chronically missing classes, work, or appointments

- Lying to friends about the amount of time spent playing or because of embarrassment about the amount of time spent playing
- Chronically playing games for longer than originally intended
- Withdrawing from real-world friends and family because you're more involved with in-game friends and gaming

- Experiencing physical symptoms due to gaming habits, such as difficulty sleeping, migraines, back and neck aches, dry eyes, or carpal tunnel syndrome
- Inattention to personal hygiene because of game playing habits

These are just a few of the consequences that addicted gamers

eye coordination and increased spatial reasoning skills.

But when the costs start outweighing the benefits, that's usually when we need to take a step back and re-evaluate our habits. So once you've determined that either you or a friend needs help, what's next?

When most people think about addictions they immediately assume that the addicted person needs to stop doing whatever it is that's causing the problem, whether it be playing video games or using illicit substances.

For the latter, this is most often the goal, since continued use usually means falling into shady activities, medical problems, and premature death. Hardcore illicit substances are life-threatening and dangerous on multiple levels, but what

about video gaming? The threat of imminent death usually isn't a treatment motivator here. In addition, many addicted gamers are playing so much because they are getting something vital from the game that they aren't getting in real life.

For some gamers, playing games gives them the only social support

“

...many addicted gamers are playing so much because they are getting something vital from the game that they aren't getting in real life.

”

- Experiencing feelings of anger, depression, moodiness, anxiety, or restlessness when not gaming
- Thinking obsessively about being on the computer or playing video games even when doing other things
- Feeling like you can only be yourself when you are playing as your avatar

can experience; the list goes on. But if you saw several of these and were immediately reminded of yourself or a friend, then you may need to take a closer look at your gaming habits.

I don't want anyone to get the wrong idea here; video games are fun and have many positive effects on our lives, like improved hand-

system they know; for others, it is a source of identity or a distraction from emotional pain. The reasons are varied, but it amounts to the same thing: you can't just yank the game away.

Taking the game away completely leaves the gamer bereft of some vital part of their life.

So the task becomes finding ways to wean the addicted gamer off of the game to manageable levels of play while helping them to find alternative real-world activities that provide the gamer with whatever it was they were seeking in the game.

For some this might be straightforward, but for others this can be a process that requires the help of a professional; most addictions do.

So if this sounded like you or someone you know, you might ask them about it or suggest they see a counselor.

The Counseling Center is at 1239 Arden Road – the same building as the Health Center – and you can call us at 395-8331 if you'd like to set up an initial meeting.

Also, come to my free workshop on video game addiction on Tuesday, May 7th at noon in Winnett Lounge. Free lunch will be provided!



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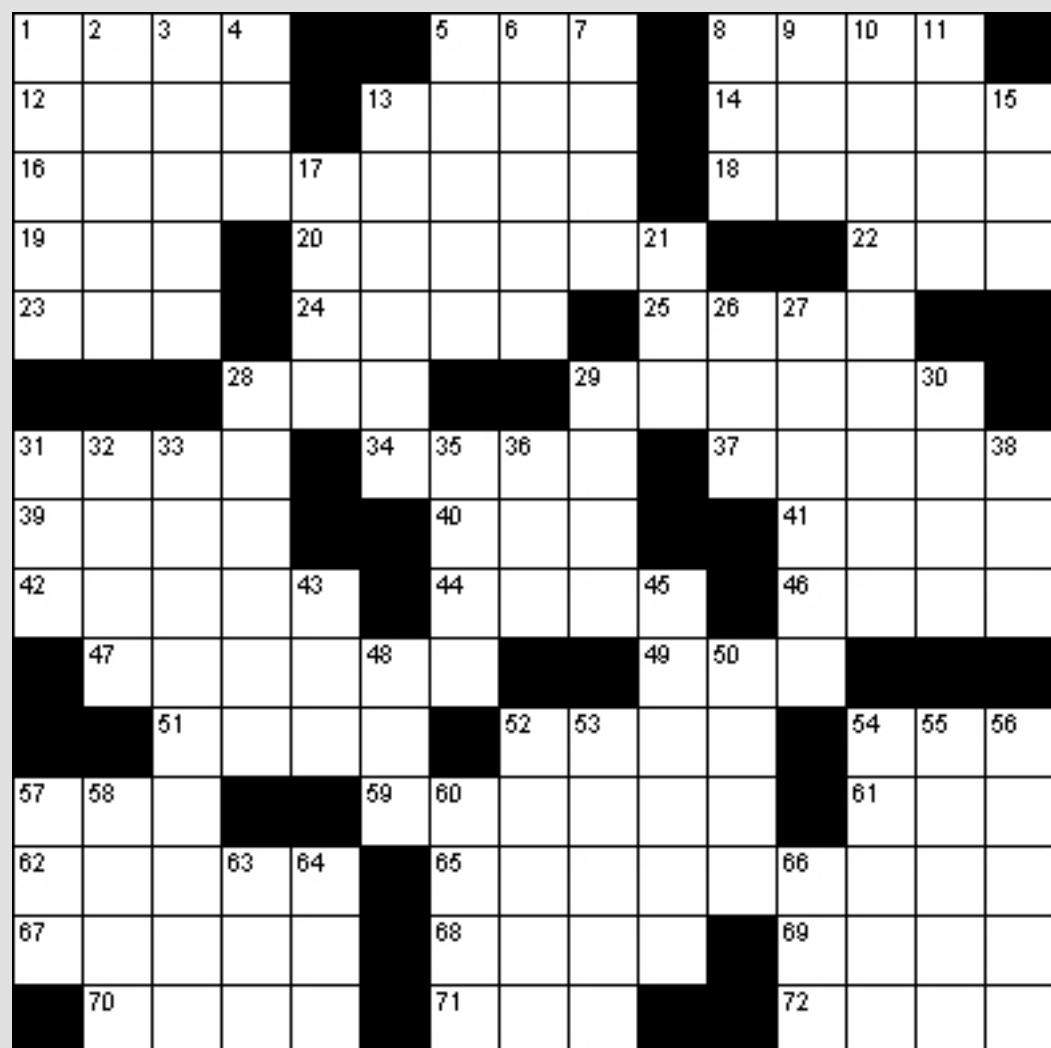
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Today's Puzzle: Crossword



[<http://www.puzzlechoice.com/>]

Across

- 1. Mountain top
- 5. In favor of
- 8. Combustible material
- 12. Two
- 13. Optical device
- 15. Small island
- 16. Colorado ski resort
- 17. Unharmed
- 19. First note of a major scale
- 20. Abaft
- 21. Thin-shelled object
- 22. Method of transport
- 23. Sum up
- 24. Cereal grass
- 25. Felines are fond of this herb
- 26. Prevarication
- 27. State capital, __ Rouge
- 28. Gemstone
- 29. Box
- 30. Portents
- 31. Fall behind
- 32. Musical notation
- 33. Part of a church
- 34. Song for one
- 35. Whittled
- 36. Part of a minute, in short
- 37. Stringed instrument
- 38. Lout
- 39. Biblical boat
- 40. Cuban currency
- 41. Asian river
- 42. Expert
- 43. Knowledge or understanding
- 44. Let for money
- 45. Beginning
- 46. Healthy
- 47. Guide
- 48. Lament
- 49. Shelf
- 50. Father
- 51. Employ
- 52. High rocky hill
- 53. Grow older
- 54. Hard-shelled seed
- 55. Not in favor
- 56. Country on the Pacific, Arctic and Atlantic
- 57. Australian flightless bird
- 58. Roald Amundsen got there first
- 59. South American mountain chain
- 60. Within
- 61. Additional
- 62. Visionary
- 63. Sever
- 64. Engrave
- 65. Affirm
- 66. Arm of the Indian Ocean, ___ Sea
- 67. Meat skewer
- 68. Abrasion
- 69. Every one
- 70. Country, initially
- 71. Unaccompanied
- 72. Musical instrument
- 73. Small hill
- 74. In addition
- 75. Far down
- 76. Net
- 77. Employ
- 78. High rocky hill
- 79. Grow older
- 80. Hard-shelled seed
- 81. Not in favor
- 82. Triple world heavyweight champion, Muhammad ___
- 83. Make amends for lodges
- 84. Live in a tent
- 85. Sport played on horseback
- 86. All assets and liabilities
- 87. Constrictor
- 88. Friend
- 89. Excited
- 90. Emergency services professional
- 91. Affirm
- 92. Arm of the Indian Ocean, ___ Sea
- 93. Meat skewer
- 94. Abrasion
- 95. Every one
- 96. Country, initially
- 97. Fertile part of a desert
- 98. Unaccompanied
- 99. Musical instrument
- 100. Small hill
- 101. In addition
- 102. Far down
- 103. Net
- 104. Employ
- 105. High rocky hill
- 106. Grow older
- 107. Hard-shelled seed
- 108. Not in favor

Down

- 1. Cuban currency
- 2. Asian river
- 3. Expert
- 4. Knowledge or understanding
- 5. Arithmetic operation
- 6. Let for money
- 7. Beginning
- 8. Healthy
- 9. Guide
- 10. Lament
- 11. Shelf
- 12. Father
- 13. Rolled up document
- 14. Biblical boat
- 15. Not in favor
- 16. Country on the Pacific, Arctic and Atlantic
- 17. Australian flightless bird
- 18. Roald Amundsen got there first
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- 47. Constrictor
- 48. Friend
- 49. Excited
- 50. Emergency services professional
- 51. Affirm
- 52. Arm of the Indian Ocean, ___ Sea
- 53. Meat skewer
- 54. Abrasion
- 55. Every one
- 56. Country, initially
- 57. Fertile part of a desert
- 58. Unaccompanied
- 59. Musical instrument
- 60. Small hill
- 61. In addition
- 62. Far down
- 63. Net
- 64. Employ
- 65. High rocky hill
- 66. Grow older
- 67. Hard-shelled seed
- 68. Not in favor

Experimental Performance Lab presents *Tesla*

CINDY DE MESA
Contributing Writer

The Experimental Performance Laboratory at Caltech and The Pasadena Playhouse present *Tesla*, a radio play for the stage.

Directed by acclaimed Los Angeles director Michael Arabian with live sound effects by the SFX artist Tony Palermo, *Tesla* will run for one day only on the Mainstage of The Pasadena Playhouse, Saturday May 4th, 6:00pm.

Special guest stars include Phil Proctor ("Big Brother," *Toy Story*) as Thomas Edison; French Stewart ("3rd Rock from the Sun," *Stoneface*) as Tesla; Sandra Tsing Loh (Caltech alum and NPR's "The Loh Life") as Katherine; Dr. Ashley Strouse (JPL Mars Rover Opportunity Driver), playing multiple roles; Dr. Steven Collins (JPL Mars Rover Curiosity Engineer), playing multiple roles; and Brian Brophy ("Star Trek: The Next Generation," director of Theater Arts at Caltech), playing multiple roles.

"A partnership with The Pasadena Playhouse and Caltech is the perfect synergy of science and art...This project...features actors from the multi-talented Caltech/JPL community alongside professional actors from the theater and film world.

Tesla tells the story of Nikola Tesla's life as a brilliant but controversial inventor and futurist during the late-19th and early-20th century. The play is excitingly staged as a radio drama featuring live sound effects. Tesla's volatile relationship with Thomas Edison, his allegiance with George Westinghouse, and his confrontation with the power brokers of American business are

Brophy. "When my friends director Michael Arabian and Elizabeth Doran, the new Executive Director at the Playhouse, decided to come onboard, everything came together. This project is unique because it features actors from the multi-talented Caltech/JPL community alongside professional actors from the theater and film world. The staging will be intriguing to

scriptwriter for the Pageant of the Masters in Laguna Beach.

Director Michael Arabian is well-known to Los Angeles area audiences, and most recently directed *Waiting for Godot* at the Mark Taper Forum.

Tesla is showing for one day only on Saturday, May 4th, at 6:00pm at The Pasadena Playhouse Main Stage.

A post-show conversation and reception with the playwright, actors, and director will follow the performance.

Proceeds for the event directly support Theater Arts at Caltech. Tickets are \$20 in advance at The Pasadena Playhouse Box Office, or Pay-What-You-Can Donation to Theater Arts at Caltech at the door.

Related information for *Tesla* and Theater Arts at Caltech:

The staged reading of *Tesla* kicks off the second year of the Experimental Performance Laboratory at Caltech's New Plays Festival, a series of four staged readings of new science-based plays.

Out of Orbit by Jennifer Maisel is the second play in the series, on May 11, directed by Ann K Lindsey.

Out of Orbit tells the story of a Mars Rover Mission Specialist at Jet Propulsion Laboratory (JPL), played by Dr. Ashley Strouse, a "real-life" JPL Mars Rover Driver. Can a brilliant scientist relate to a learning deficiency in her daughter? Can she keep up with her life on two different planets?

Sila by Chantal Bilodeau is the third play of the series on May 18, directed by Arden Thomas.

Sila stars Sandra Tsing Loh, host of NPR's *The Loh Down* and Caltech's *The Loh Down on Science*. *Sila* is a powerful, gripping, and poetic play about climate change and its consequences for the people and animals living in the Arctic Circle.

The Washing of Water by Marcus Renner is the final play in the series on June 1, directed by TACIT artistic director Brian Brophy.

The Washing of Water is based on over 60 interviews conducted across Altadena, La Cañada Flintridge, and Northwest Pasadena.

The Washing of Water follows an artist activist, a homeless teenager, and a mother whose stories intersect as they fight a polluted past and search for a fresh start amidst the wilds of the Hahamonga Watershed Park.

See www.tacit.caltech.edu for more information about the New Plays Festival.

- Brian Brophy

recounted from the perspective of the possible implications of his work to national security.

"A partnership with The Pasadena Playhouse and Caltech is the perfect synergy of science and art," says TACIT Director Brian

Pasadena audiences as it is a rare opportunity to see a radio drama with multiple voices, archival footage, and live sound effects."

Playwright Dan Duling is an award-winning playwright, author of more than 20 plays, and the

Caltech track and field competes at SCIAC Finals

GOCALTECH.COM

The Real Sports Editor

At the last team competition of the season the Beavers competed the SCIAC Championships.

Women's Highlights

Sarah Wright finished third in the javelin throw. The senior had her best attempt on her second throw when she recorded a mark of 114'10" to outdistance herself by over eight feet from the fourth place finisher.

Paige Logan took second place in the shot put with a thrown of 39'7" which topped her nearest competitor by over 18 inches. The junior unleashed her best throw on her sixth, and final, attempt.

In addition to those team points Logan helped bring team points in the discus throw while Wright tallied team points in the 100 meter hurdle race.

Stephanie Reynolds scored team points in the 1500 meter run with

a time of 4:48.28. The sophomore finished sixth in the race.

Juliette Becker also contributed to the Beavers scoring total as she placed eighth in the 3000 meter steeplechase event with a time of 11:50.18.

The Beavers beat Whittier and Chapman to finish seventh.

Men's Highlights

Eric Martin ran the 1500 meter race in 4:03.45 to finish sixth and score points for the Beavers.

Brice Nzeukou finished tied for seventh in the high jump by clearing the bar in 5'9 3/4". Robin Yoon scored points in the long jump with his best jump of 20'11 3/4" to finish seventh overall.

Also scoring for Caltech was Matt Voss as he got a point in the 110 and 400 meter hurdle races. William Hoza finished eighth in the pole vault as the first-year cleared 12'6".

The event was held at Occidental College.



Caltech men took eighth, while the women finished seventh in the 2013 SCIAC Track and Field Championships

- gocaltech.com



Left: Junior Paige Logan hits the Dougie following a 2nd-place throw in the shot put. She went on to showcase those moves at Blacker Interhouse. Right: Senior Sarah Wright floats through the air just prior to releasing a massive javelin throw that would land her in 3rd place in the competition.

- gocaltech.com

Senior Day brings a win for men's tennis team

GOCALTECH.COM

The Real Sports Editor

It was a successful senior day for the Caltech men's tennis team as they posted a 5-4 win over Linfield on Sunday afternoon.

It is the Beavers first team win since the 2011 season; a span of 43 matches.

In addition, it sent seniors Brian Kim and Amol Kamat out on a good note as they team won their final home match.

Linfield nearly swept the doubles matches but an 8-3 victory by Rushikesh Joshi and JD Co-Reyes at the No. 3 spot gave the home team some momentum heading into singles play.

Need to win four singles matches the Caltech squad did exactly that. The Beavers won their four singles matches in straight sets. Joshi won 6-3, 6-3 at the No. 2 spot while Luka Mernik was right behind him with a 6-2, 6-0 win at the No. 3 position.

Alex Henny produced a convincing 6-2, 6-0 win at the No. 4 singles match. Co-Reyes fought hard to tally a 7-6 (5), 6-3 win at the No. 6 position to help seal the win.

Tennis Match Results

Linfield vs Caltech
4/28/2013 at Pasadena, CA
(Braun Tennis Courts)
Caltech 5, Linfield 4



Seniors Brian Kim and Amol Kamat pose next to their coach while holding cute stuffed beavers. Now would be the perfect time to insert a snarky remark about Amol, but in honor of the years he's worked on the Tech we'll spare him. Also, I'm pretty sure there's nothing I can say that'd be as funny as what he could come up with.

- gocaltech.com

Singles competition

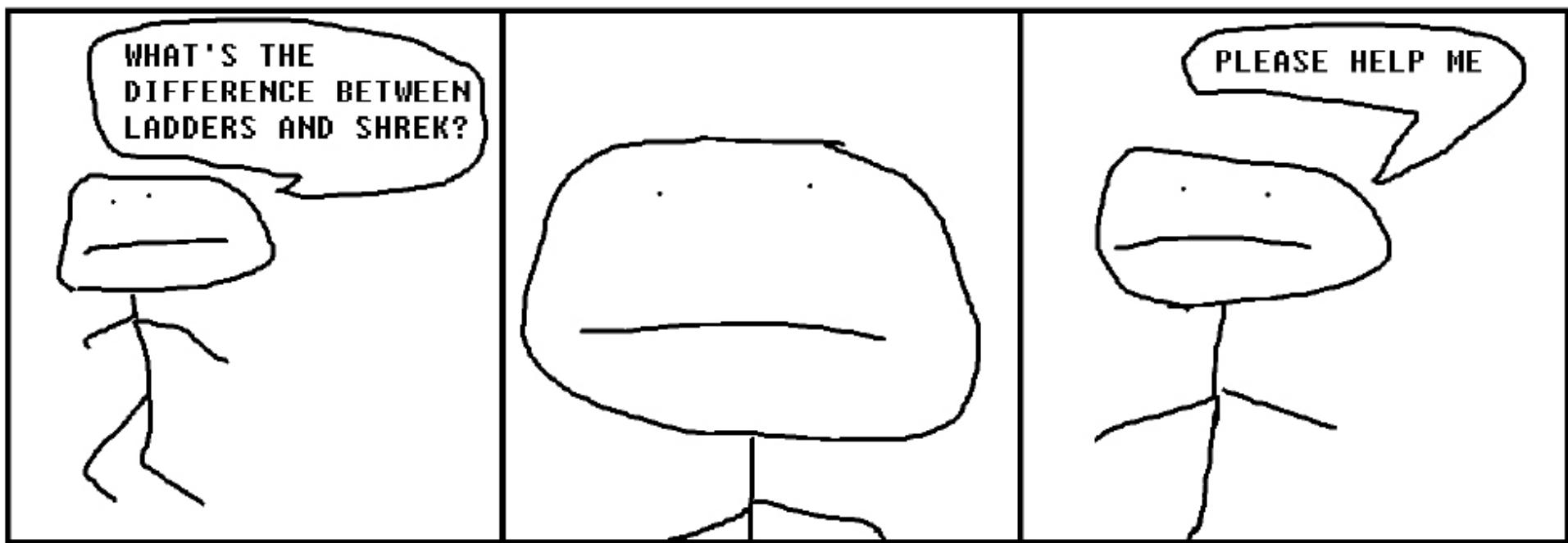
1. Lyons, Zachery (LIN-M) def. Devashish Joshi (CALTECHM) 6-7, 6-2, 10-5
2. Rushikesh Joshi (CALTECHM) def. Roos, Micah (LIN-M) 6-3, 6-3
3. Luka Mernik (CALTECHM) def. Trousdale, Joel (LIN-M) 6-2, 6-0
4. Alex Henny (CALTECHM) def. Hawkins, Tim (LIN-M) 6-3, 6-0
5. Kleinman, Lukas (LIN-M) def. Amol Kamat (CALTECHM) 6-2, 6-1
6. JD Co-Reyes (CALTECHM) def. Mangan, Alex (LIN-M) 7-6 (7-5), 6-3

Doubles competition

1. Lyons, Zachery/Kleinman, Lukas (LIN-M) def. Devashish Joshi/Luka Mernik (CALTECHM) 8-6
2. Roos, Micah/Hawkins, Tim (LIN-M) def. Amol Kamat/Ishan Mehta (CALTECHM) 8-4
3. Rushikesh Joshi/JD Co-Reyes (CALTECHM) def. Mangan, Alex/Trousdale, Joel (LIN-M) 8-3

BACK

BY HUTT BEAD



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parties.*

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For info on Caltech Public Events visit: www.caltech.edu/content/public-events

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