### Aggieland2015

# It's not too late

to order your copy of the 2015 Aggieland yearbook. The 113th edition of Texas A&M's official yearbook will chronicle the 2014-2015 school year - traditions, academics, athletics, the other education, the Corps. Greeks, residence halls, campus organizations, and student portraits. Distribution will be in Fall 2015. By credit card go online to http://aggieland.tamu.edu or call 979-845-2613. Or drop by the Student Media office in Suite L400 of the MSC.

Aggieland2015

i.



College StatioN, TX 979-255-8905

# SCIENCE

The Planetary Society will launch its LightSail spacecraft in May to test whether light is a feasible propulsion system.



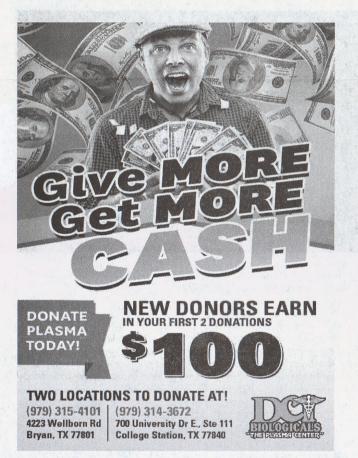
Over \$65,000 in weekly cash prizes ! Great Food at Great Prices at Brazos City Grill **ENCLOSED** Security - Unlimited Pull Tabs & Event Tabs NON-SMOKING Every Thursday is AGGIE NIGHT! 1/2 Price Paper & 2 FREE Adult Beverages! SECTION!!

\$10.00 - 1/2 Price FortuNet Electronics (\$23 Full Prim) Tuesday, Thursday, Saturday & Sunday

1805 Briarcrest Drive in Bryan Across from Bryan High Doors Open At 5:00 pm, 7 Days A Week (979)776-0999 www.brazosbingo.co



Brazos Bingo supports the following charities: Brazos Valley Council on Alcohol and Substance Abuse, Bubba Moore Memorial Group, Inc. College Station Professional Firefighters Association Texas Local 4511, St. Joseph Catholic Church, St. Joseph Catholic School and Scottys House Brazos Valley Child Advocacy Center, Inc.



# **Pushed by starlight**

2015 kicks off with innovative space exploration test

announced Monday that its LightSail spacecraft would launch in May. The launch is just a test — the satellite will only have enough time to test its systems upon deployment before it burns up in re-entry - but LightSail's emergence is a milestone for two reasons. It will give engineers valuable data about how to successfully launch a second LightSail in 2016, which is expected to fully deploy and use the sun's light to navigate. And the entire project was developed and funded by private citizens, not governments.

The science behind LightSail is an exploration into the quirky contradictions beyond classical physics. People walk through sunlight every day of their lives, but no one I know of has ever been knocked over by a strong gust of solar wind. Light feels warm, looks beautiful and for everyday reasoning has no mass — unless you're a rocket scientist.

Light is made up of particles called photons. The massive forces that keep the sun burning emit streams of photons, among other things. While photons don't have mass in the classical sense, they do have momentum and thus can be modeled as tiny tennis balls. If you throw a tennis ball

not something that tends to last. Whitten said the long-term data typically shows public opinion turn

at a toy boat's sail, the impact will force the boat forward by a transfer of momentum. LightSail will do the same, but on a larger scale. It will deploy a reflective sheet just 1/4 the thickness of a trash bag over an area of

344 square feet. Millions of photons will strike this surface every second, each imparting a tiny amount of momentum. It is a slow but continuous process that may one day accelerate spacecraft to speeds faster than conventional rockets.

2

If such technology can be proven, it would open up untold opportunity for space exploration. Spacecraft would no longer need heavy rockets or complicated thrusters. Future men and women may one day see a star that fascinates them, point a spacecraft in the general direction, raise a sail and explore it. And if you venture too far from a star, no worries — future ground-based lasers could one day accelerate lightsail ships far into deep space and beyond. Who knew space travel could be so easy?

> John Rangel is an aerospace engineering junior and science and technology editor for The Battalion.



NEWS The Battalion | 1.29.15

### John Rangel @JohnRangel2016

azing at the stars nearly 400 years ago, Johannes Kepler noticed something out of place comet tails seemed to be blown about by a "solar wind," a phenomenon he described as a possible way to propel space ships throughout the heavens. Europeans at the time were eagerly sailing to the New World on winddriven ships; why not do the same in space?

Kepler's "solar wind" never gained traction with 17th century explorers and was eventually disproved, but the idea to harness the sun as propulsion has fascinated science fiction fans and scientists ever since. For much of written history, people have seen something fascinating from afar, raised a sail and explored it. The idea that outer space might be so easily traveled is a dream for space enthusiasts everywhere and it took a small step closer to reality this week.

The Planetary Society, a private non-profit space advocacy group,

### FOUCAULT CONTINUED

in hard political times

The Academy for the Visual & Performing Arts

**Actors From The London Stage presents** Macbeth



Thursday, January 29, 2015 7 PM in Texas A&M **Rudder Theatre** 

Tickets \$5 Students \$10 General Admission Available at the MSC Box Office Call 979.845.1234

and socio-economic hard times."

Guy Whitten, political science professor and director of the Program in Scientific Political Methodology, said he found Foucault's presentation insightful and thought the data on public opinion in the French democracy reflected events in America's recent past, namely in the aftermath of 9/11.

"What he was showing and what he is starting to see in some of the data they've taken since the Charlie Hebdo events is that things have temporarily gotten better, but this is what always happens," Whitten said. "I mean this is what always happens, we saw this after 9/11, Bush's popularity soared to a sort of all-time record and then sort of steadily went down.'

Whitten said although this spike in unified public sentiment is a common short-term trend, it is fairly pessimistic.

Whitten said these trends happen across the histories of all longerstanding Western democracies.

"I think we see this across a lot of major democracies - the older, more mature democracies - people don't like the national politicians, they don't like the national political parties, but they still think with all its flaws that democracy is the way to go," Whitten said.

Claire Stieg, political science graduate student, said she found the lecture very timely and applicable with current events.

"I think in light of the recent events and what's happening in France it's very relevant, and he broke it down so it was easy for someone who's not necessarily an academic to see what's going on in France right now and see how the population is reacting to current events," Stieg said.

Aggie Screenwriting Acting and Production Club, said Macbeth would be an interesting role to play because the character kills his king for power, then kills his friend out of fear of losing that power and deals with guilt throughout most of the play.

**MACBETH** CONTINUED

Dan Martinez, leadership

senior and acting chair of the

'I actually got to see the London actors last year," Martinez said. "They did a spectacular job and they only had five actors there as well. I don't think that just five people are going to limit the performance of it, because there's so much liberties you can take."

Greenwald said the complexity of Macbeth adds to the play.

"He knows what he's doing, he knows he's literally playing with fire and by fire I mean Hell," Greenwald said. "To kill anybody is bad, but to kill a king - they said a king was the ultimate act of sacrilege, because who puts the king on the throne? God. So to kill a king was, in a sense, to lash out on God

## is a tale of revenge and greed and lust for power."

Laura Estill, assistant professor in the Department of English

himself."

Estill says the campus is fortunate to have the Actors from the London Stage come to College Station to portray Macbeth and other characters.

"I'm really looking forward to this production," Estill said. "Despite the fact that the play is cursed, it's actually a blessing for us to have the actors coming.'

The performance is at 7 p.m. Thursday in Rudder Theatre. Tickets are \$5 per student and \$10 general admission.





### Mark Doré, Editor in Chief

Mark Doré, Edi Aimee Breaux, Managing Editor Jennifer Reiley, Asst. Managing Editor Lindsey Gawlik, News Editor Samantha King, Asst. News Editor Katy Stapp, Asst. News Editor John Rangel, SciTech Editor Katie Canales, Life & Arts Editor

tor in Chief Brandon Wheeland, Sports Editor Carter Karels, Asst. Sports Editor Shelby Knowles, Photo Editor Allison Bradshaw, Asst. Photo Editor Meredith Collier, Page Designer Claire Shepherd, Page Designer

THE BATTALION is published daily, Monday through Friday during the fall and spring semesters and Tuesday and Thursdcy during the summer session (except University holidays and exam periods) at Texas A&M University, College Station, TX 77843. Offices are in Suite L400 of the Memorial Student Center.

News: The Battalion news department is managed by students at Texas A&M University in Student Media, a unit of the Division of Student Affairs. Newsroom phone: 979-845-3315; E-mail: editor@thebatt.com; website: http:// www.thebatt.com.

Advertising: Publication of advertising does not imply sponsorship or endorsement by *The Battalion*. For campus, local, and national display advertising, call 979-845-2687. For classified advertising, call 979-845-0569. Office hours are 8 a.m. to 5 p.m. Monday through Friday. Email: battads@thebatt.com.

Subscriptions: A part of the University Advancement Fee entitles each Texas A&M student to pick up a single copy of *The Battalion*. First copy free, additional copies \$1.