THE UNITED FEDERATION OF PHOENIX

The United Federation of Phoenix (UFP) is the Southwest’s oldest Star Trek and science fiction fan organization, continuously operating since 1975. The club meets bi-weekly at various locations around the Phoenix metropolitan area. As a group we have picnics, go hiking, watch movies, play games, take trips, and are active in the volunteer community. You are about to read “Subspace Chatter,” our official bi-monthly publication which highlights science fiction and fandom events, spotlights our members, and provides a resource for all things UFP. If you are in the area and would like to attend one of our meetings, please email us at info@u-f-p.org

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We aim to highlight the interests of our diverse membership. Make suggestions or contribute to Subspace Chatter. Email us today!
Captain’s Log, stardate 201810.1. As I accept the reigns of Captain once again I am reminded of the first time I was elected Captain in September 2010. I found some photos from back then that I thought were fun to see again.

If any of you remember, we had been through a difficult time then, and my first words as Captain ring true today as well.

“They say the whole is greater than the sum of its individual parts. When I consider our current members, and all their vast knowledge, experiences, unique talents, backgrounds and skills, I realize that our club is truly great. I am excited, honored, and humbled to be your captain. Warp speed ahead!”

I am excited to once again be Captain of the Uniter Federation of Phoenix (UFP) here in 2018. So much remains the same, and yet some things change. Our calendar reflects this, and I am excited about our activities for the next six months. We are participating in our usual staples, such as Christmas Angels, hikes, and parties, while adding new events like “Science with a Twist,” “To Boldly Draw,” and trips to the National Guard Museum, spring training and so much more!

I hope you all will continue on this journey with me into the coming year and beyond. Engage!

Dr. Kimberly Smith, UFP Captain
This month I attended the final Science Team meeting of the NASA Dawn Mission hosted by our European colleagues. For those of you who may not know, the Dawn mission is a Discovery-class NASA robotic mission designed to orbit the two most massive objects in the Main Asteroid Belt (located between the orbits of planets Mars and Jupiter), asteroid (4) Vesta and dwarf planet (1) Ceres. Launched in September 2007, the Dawn spacecraft used solar-electric ion propulsion (like that seen in the TOS episode, “Spock’s Brain”) to travel first to Vesta (orbited from July 2011-September 2012) then to Ceres (orbiting since March 2015). To save costs, the Dawn spacecraft has a German-built framing camera (takes pictures in B&W and color, and to make stereo topographic maps) and an Italian-built spectrometer (determines the minerals making up the surface), as well as an American-built gamma ray and neutron detector (measures elemental abundance making up the surface).

After completing its prime mission at both objects, NASA approved an Extended Mission at Ceres. We dropped the orbit altitude of the spacecraft to take very high-resolution images (~5-10 meters per pixel) of 90 km diameter Occator impact crater, which contains the enigmatic “bright spots” first observed on approach to Ceres in 2015. It turns out these bright spots, which we call “facula”, or “faculae” (plural), are composed of carbonate minerals and salts which stand out against Ceres dark surface mostly composed of ammonia-bearing silicates and other dark minerals. We think these bright deposits were emplaced either by cryovolcanic eruptions or as intrusions of brine-rich waters. Indeed, the largest central bright spot (we call it Cerealia Facula) has a dome in its center similar to silicic volcanic domes seen on Earth, but with a different composition. Over the next year I will be working with my Dawn colleagues to make a highly-detailed geologic map of the Occator crater interior to further investigate its origins.

The Dawn spacecraft itself has nearly exhausted its hydrazine fuel, which is required to point the instruments and point the antenna towards Earth to communicate. When the fuel is gone and we lose contact permanently with the spacecraft later this year, it will be in a stable orbit about Ceres for at least the next 50 years. There it will remain as a testament to human ingenuity and the drive to explore “strange, new worlds”, the mantra behind our beloved TV show Star Trek.
**CERES’ INTERNAL STRUCTURE**

**Artist’s Concept**

NASA/JPL-Caltech/
UCLA/MPS/
DLR/IDA

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**Cerealia Facula**

This mosaic combines images obtained from altitudes as low as 22 miles (35 km) above Ceres’ surface.

**Science Fiction to Science Fact**

The concept of Ion Propulsion was explored in “Spock’s Brain”, a classic episode of Star Trek.

**Testbed unit of Framing Camera**

There are two of these on the spacecraft, this exact size, and they took all of the pictures of Vesta and Ceres.

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**UNITED FEDERATION OF PHOENIX MEMBER DAVID A WILLIAMS** is an Associate Research Professor in the School of Earth and Space Exploration at Arizona State University. He has worked on the NASA Magellan, Galileo, Dawn, and Psyche missions and the ESA Mars Express mission. He holds the record for years leading the UFP, have completed seven terms as UFP President between 2000-2018. He is a Fellow of the Geological Society of America and the International Astronomical Union named asteroid 10,461Dawilliams in his honor.
Star Trek visual effects were an expense that the producers usually tried to minimize. The opportunity to save dollars on Star Trek Deep Space Nine episode # 562, “The Emperor’s New Cloak” was too good to resist. In the story Quark and Rom steal a ‘cloaking device.’

When this episode was photographed I was on set as the Visual Effects Supervisor. It was decided that since the cloaking device was “cloaked” or invisible, we didn’t need to do any visual effects and the production could save some money. I wondered if the pantomime was going to really sell that they had a mechanical device they were stealing. I keep asking the producers if they were sure there would not be an effect; that they didn’t want me to take camera measurements and documentation of the set up just in case. I was repeatedly reassured there would be no visual effects and there was no need to slow production by documenting anything.

During rehearsals the two actors found it difficult to keep a consistent distance between themselves and between their own hands. We set up a rectangle of string so the actors playing Rom (Max Grodénchik) and Quark (Armin Shimerman) could keep some consistent size and distance between their hands and each other. After all they were supposed to be carrying a rigid heavy device. I am so glad we did that.

After the show was cut together there was some concern that the audience might not catch what was going on. It was decided that we did, indeed, need to see the cloaking device phase in and out of visibility.
We took the full sized prop over to Image G, the motion control vendor for Star Trek. A special mount had to be constructed to hold the prop for repeat pass motion control photography. Since no measurements were taken on set, the model had to be positioned frame by frame to line up with their hands and body positions. The repeatable camera allowed us to shoot multiple passes for production photography and mattes.

The film was transferred to digital and composited with hand drawn digital mattes to place the device behind the Rom and into Quark’s visible hands. With a little bit of a dissolve and some animated sparking the cloaking device became visible in the culprit’s hands and the audience got to enjoy the visual gag.

David Stipes is a visual effects consultant, artist and compositor. In 1992 David joined the “Star Trek: The Next Generation” team, and two years later received an Emmy Award for Outstanding Visual Effects. Embracing the change from physical models to computer effects, David championed the use of CGI in several Star Trek series over the years. Recently David has lent his talents to productions filmed right here in Arizona. As a member of the United Federation of Phoenix, David offers his unique insights from his professional life to fellow fans through his contributions to this publication.

“...COMPOSITION WITH HAND DRAWN DIGITAL MATTES.”
Phoenix News Times just released its Best of Phoenix awards this week and FilmBar Phoenix took home “Best Theater,” beating out Roadhouse Cinemas, iPic Theaters, and Alamo Drafthouse. While that is an amazing feat, Cosmopolitan Magazine also called FilmBar the best theater in Arizona.

What is going on in that theater to allow FilmBar to win these awards? Is it the atmosphere, programming, or staff? If you are unfamiliar with this establishment I can tell you safely it is a combination of everything. An attentive staff that is as much your friends than workers of the establishment. They often have in-depth conversations with their patrons, take suggestions, and treat their attendees like they have ownership in the theater.

An example of this is their Facebook group, FilmBar Film Freaks, in which a person can post about an upcoming film anniversary or restoration of a classic film. That post could lead film programmer Andrea Canales to schedule that film for a showing in the theater. I have seen films like Deep Red, Spice World, Donnie Darko, and a slew of Nic Cage films find their way onto the schedule because of these posts.

FilmBar specializes in showing art, indie, and foreign films as well as hosting unique film series. The film series includes a partnership with ASU in which college professors will discuss a science fiction film being shown. Who knows, maybe one-day Dave Williams will introduce The Martian. Other films series includes Zia Nights, where they can pick anything from Frankenstein to Coming to America. Or Cinemania, a science fiction and horror film expo. And The 2nd Dimension which focuses on introducing audiences to animated classics from across the world. Honestly the schedule is the most interesting film lineup in the valley.

With a theater capacity of 76 full of cinephiles and the ability to bring in your own food to eat from the outside, you can experience the exploding Roosevelt Row dining scene in the theater while watching a fantastic film. Enjoy mouthwatering Trapp Haus BBQ, the fabulous Brulee Burger of Angels Trumpet Ale House, or even the award winning Grand Avenue Pizza Company inside the theater. The only catch is you must order your drinks from the theater. It’s no wonder why people keep coming back.

If you haven’t experienced FilmBar Phoenix I highly suggest doing so because you don’t know what you are missing until you do.

**Upcoming Screenings that may interest you**

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<thead>
<tr>
<th>Date</th>
<th>Film Title</th>
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<tbody>
<tr>
<td>10/25</td>
<td>Eternal Sunshine of the Spotless Mind</td>
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<tr>
<td>10/28</td>
<td>Halloween 40th Annv 4K Restoration</td>
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<tr>
<td>11/16</td>
<td>Novemburt: Smokey and the Bandit</td>
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<tr>
<td>11/19</td>
<td>WarGames</td>
</tr>
<tr>
<td>12/5</td>
<td>Heathers</td>
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Special thanks to Lister of Smeg for the contribution.
Star Trek Discovery. The latest incarnation in the Star Trek television franchise. The first new Star Trek TV show in 12 years. The first Trek show to premiere on a pay-to-view streaming service (CBS AllAccess). The first Trek show whose leading character is not a captain, but rather a first officer, and also a black woman. And also the first new Trek show to premiere in the era of social media. All of these factors play into the ongoing fan discussions about this newest Trek show, both online and in person. Some fans think the show is too dark in subject matter, although a war was central to storytelling in Seasons 5-7 of Star Trek: Deep Space Nine. But if we step back and look at the premiere of every new Trek show since TOS, fans have hated it, until they watched and later embraced it. Such is the case for Star Trek Discovery (DSC) as well!

Season 1 of DSC takes place in the Prime Universe of Gene Roddenberry, 90 years after Star Trek Enterprise and 10 years before The Original Series. The show is made with 2018 production values at a cost of ~$8 million/episode (compared to the ‘cardboard sets and Christmas Tree lights’ of TOS), which is also a source of controversy among many Trek fans. Most importantly, the show is totally produced in a serialized storytelling format antithetical to TOS and TNG, but more typical of modern shows like Breaking Bad and Game of Thrones. Thus, episodes have to be watched in order to understand the full story. Although this was pioneered on Deep Space Nine, DSC has embraced it, telling the story of the rise, fall, and redemption of First Officer Michael Burnham, an African-American human woman raised on Vulcan by her adoptive parents Sarek and Amanda Grayson (yes, the parents of Spock!) The story is told in the context of a Federation-Klingon war only hinted at in TOS. It is like a book in 15 chapters, each episode a chapter in that book. But in the 15-episode Season 1, a lot of ground is covered and a lot of growth is seen in the main characters.

Fan reception to the show, as ascertained by me at screenings held at ASU and from panels at Phoenix Comic Fest and CoKoCon 2018, suggests fans are generally favorable to the show. Most fans of DSC would like to see more ‘exploration’ and less of the ‘war’ darkness, more character growth and interaction and are looking forward to Season 2. Season 1 ended with the arrival of the USS Enterprise commanded by Christopher Pike (to be played by Anson Mount), and Season 2 will include exploration of a strange phenomenon in the galaxy as well as a search for Commander Burnham’s adoptive brother, Spock (to be played by Ethan Peck, grandson of acclaimed American actor Gregory Peck).

Until Discovery’s Season Two premiere in late January, we can look forward to four ~15-minute “Short Trek” stories coming to CBS AllAccess this October. Many of us in the UFP are looking forward to all that Star Trek Discovery will present in the next year!
DISCOVERY SEASON 2

Fresh from New York Comic-Con, the panel of guests from Star Trek Discovery revealed a new trailer and details from Season 2 of the hit CBS All Access series. SPOILERS AHEAD!

Spock’s back, and he’ll attempt to rival Riker for the best sidekick with a beard.

Rebecca Romijn will revive the unnamed character Number One and has shared images from set.

Leading the crew, at least for a while, will be the legendary Captain Pike, on loan from The Enterprise. Pike will be a “good guy”, which may be a welcome to some after the crew’s stint with Captain Lorca last season.

What would this return to The Cage-era characters be without the Talosians? Hints were dropped that we may be seeing them return as well.

Mirror Georgiou explores her darker dark side in the ranks of Section 31.

The Klingons have a new look – with hair! Apparently these bald Discovery Klingons always could grow hair, but shave their heads in times of war, while growing it long in times of peace?

All this and much more await us. The crew promises a “return to classic Trek” this season. Bearded Spock and the crew of the Discovery arrive Thursday January 17

SHORT TREKS

While awaiting the premiere, check out “Short Treks” available now on CBS All Access. These mini adventures aim to flesh out character details in this expansive new universe.

The first episode “Runaway” focuses heavily on newly-promoted Ensign Tilly “who finds herself tested by her critical mother and an unusual alien who ends up having a lot of things in common.”

Actress Mary Wiseman says of her episode “I don’t think that Tilly’s ever really had to face a crisis on her own. So, that was really nice.” She also refers to the Short Trek as a morality tale.

MAKE IT SO!

More exciting Trek news from NYCC centers around the upcoming Captain Picard series, which we now know will not be a limited run but a full series with multiple seasons. The series focuses around an older Jean Luc Picard a couple decades after we last saw him. The writing team has been working tirelessly for over a month on the first batch of scripts, and filming is set to begin in April.

NEW SCI-FI TV THIS FALL

THE FIRST | Sept 14 (premiere), Hulu
Sean Penn and 4 astronauts go to Mars

THE GIFTED | Sept 25 (season 2), Fox
X-Men without the X-men

TITANS | Oct 12 (premiere), DCU
Yes, Robin says “FU” to Batman

OUTLANDER | Nov 4 (season 4), Starz
Romantic time-travel set in Scotland

NIGHTFLYERS | TBD, SYFY
Think “Aliens meets Jacob’s Ladder”

CROSSWORDS OF TIME

ACROSS
1. Garak’s profession
2. Quark’s currency
5. Trek Show filmed in Canada
6. Mirror Universe plot twist
7. Official language on Google
9. Original Series Composer
12. The “Big E”
13. Janeway’s vice
14. Current UFP Captain
15. The Mycologist
16. UFP Secretary 2006-2016

DOWN
1. Tailor’s Dilemma
2. Latinum
3. Lorca’s Borg ship
4. UFO VP from 2013-2017
5. Enterprise 10 Anniversary
6. Great Bird of the Galaxy
7. Alt timeline created by Nero
8. UFO Treasurer 1992-2004
10. Loc 2018 Halloween party
11. Quantum Leap vet on ENT
The United Federation of Phoenix (UFP) is the southwest's oldest Star Trek and science fiction fan organization, continuously operating since 1975. We meet every two weeks on Saturdays at various locations around the Phoenix metro area. Membership is open to anyone and visitors are welcome to sample two meetings before paying dues. Our activities have included picnics, model rocket launches, arts & crafts, pool parties, supporting local sci-fi conventions, charity events, and of course, talking with fans about Trek!

If this sounds like something you'd like to check out, please email Dave at info@u-f-p.org, or check out our website at www.U-F-P.org.

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44 YEARS AND COUNTING

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TRIP AROUND THE SUN

This September and October we want to acknowledge and celebrate the birthdays of Kevin, Jeff, and Steve. Live long and prosper, gentlemen.

STATE OF THE GALAXY

The UFP has started a new club year, and with it an exciting new calendar of events. We can’t wait to enjoy the weather with BBQs, hikes and much more this season. See below for more!

FROM THE EDITOR

I am honored and humbled to inherit the duties of newsletter editor for the UFP. I am proud to follow in a line of dedicated members whose talents and love of tradition have kept this publication going since July of 1984. I am looking forward to contributing my graphic design abilities to this club that I have admired since I joined at the age of 14. I have plenty of ideas for this bi-monthly magazine, but I can’t do it alone. I want YOU to make Subspace Chatter the best it can be. So please email me with suggestions for content you’d like to see, or author an original article on the subject you care about most. As my predecessor John would say, let’s keep the dream alive!

- David Matteson, Editor

HAILING FREQUENCIES

Editor: davidmatteson@gmail.com
UFP general info: info@u-f-p.org

UFP CALENDAR FALL 2018 - WINTER 2019

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<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>EVENT</th>
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<tbody>
<tr>
<td>FRI OCT 19</td>
<td>6PM</td>
<td>Science with a Twist (for adults) at AZ Science Center</td>
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<td>SAT NOV 3</td>
<td>6PM</td>
<td>Halloween Party at Annette’s, Central Phx</td>
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<td>SAT NOV 10</td>
<td>1PM</td>
<td>Hike &amp; Wine and Cheese Tasting at Dave and Kim’s, N Phx</td>
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<tr>
<td>SAT NOV 24</td>
<td>-</td>
<td>See “Fantastic Beasts 2” at Harkins Theater TBD</td>
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<tr>
<td>SAT DEC 8</td>
<td>NOON</td>
<td>Lunch &amp; Biz followed by Christmas Angels at PV Mall</td>
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<tr>
<td>SAT DEC 22</td>
<td>4PM</td>
<td>White Elephant Christmas Party at Walt’s, Glendale</td>
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<tr>
<td>MON DEC 31</td>
<td>8PM</td>
<td>New Year’s Eve Party at Annette’s, Central Phx</td>
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<td>SAT JAN 5</td>
<td>2PM</td>
<td>International Potluck &amp; Short Treks at Steve’s, Glendale</td>
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<tr>
<td>SUN JAN 13</td>
<td>NOON</td>
<td>Free, Tour of Phoenix Art Museum, Dinner At</td>
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<tr>
<td>SAT FEB 2</td>
<td>-</td>
<td>Tour Nat. Guard Museum, Dinner After Biz at Annette’s</td>
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<tr>
<td>SAT FEB 16</td>
<td>-</td>
<td>Road Trip: Tucson Gem &amp; Mineral Show</td>
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<tr>
<td>SAT MAR 2</td>
<td>-</td>
<td>Baseball Spring Training Game and Meal, TBD</td>
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<tr>
<td>SAT MAR 16</td>
<td>7PM</td>
<td>BBQ and Bat Walk at Dianna &amp; Kevin’s, Scottsdale</td>
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<tr>
<td>SAT MAR 30</td>
<td>7AM</td>
<td>Hike &amp; To Boldly Draw Game at Dave and Kim’s, N Phx</td>
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<tr>
<td>SAT APR 13</td>
<td>-</td>
<td>Calendar Planning for Second Half of Year, TBD</td>
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LOCAL FANDOM EVENTS IN ARIZONA

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<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
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<tbody>
<tr>
<td>TUES OCT 23</td>
<td>6PM</td>
<td>Sci-Fi TV Dinner: Battlestar Galactica (Free, RSVP)</td>
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<tr>
<td>NOV 2 TO 4</td>
<td>9AM</td>
<td>Tucson Comic-Con (Tucson Convention Center)</td>
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<tr>
<td>SAT NOV 3</td>
<td>10AM</td>
<td>Tempe Book Festival (Tempe Public Library)</td>
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<tr>
<td>NOV 9 TO 11</td>
<td>10AM</td>
<td>Tucson 45 (Sheraton, Tucson, AZ)</td>
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Sci-Fi TV Dinner: Battlestar Galactica (Free, RSVP)
What are the challenges of sustaining a human society in space? With Anne Cafell Saunders, writer for BSG, Smallville. At ASU Marston Exploration Theater.

Tuscon 45 (Sheraton, Tucson, AZ)
45th annual Sci-Fi, Fantasy, and Horror convention in Tucson, featuring Author Goh Joe R. Lonsdale, Geoff Notkin, Frank Powers, Madame Askew and more!
Welcome to the Southwest's oldest Star Trek and science fiction fan organization, continuously operating since 1975. The UFP is a collective of like-minded men and women from all walks of life who get together to have fun, engage in activities, and celebrate our shared love for Star Trek. Inside these pages is "Subspace Chatter," our official monthly publication, which highlights science fiction and fandom events, spotlights our members, and provides a resource for all things related to the UFP! If you are into Sci-Fi and are in the Metro Phoenix area, consider attending one of our meetings. We would be glad to meet you. Drop us a line at info@u-f-p.org for more info.

INSIDE THIS ISSUE OF SUBSPACE CHATTER

UFP Captain Kim Smith previews an exciting new calendar of events. Dave Williams showcases the trials and tech of NASA’s Dawn mission. Step inside one of the best indie film venues in town. Get our take on the first season of Star Trek Discovery. And learn the secrets behind a tricky effect in a classic episode of Deep Space Nine from the man behind the scenes: Visual Effects Supervisor, and UFP member, David Stipes.