Flat Earth Theatre Presents

SILENT/SKY BY LAUREN GUNDERSON

March 10th – 26th 2017 Mosesian Center for the Arts Watertown, MA

Silent Sky

by Lauren Gunderson | directed by Dori A. Robinson

CAST

Henrietta Leavitt
Margaret Leavitt
Peter Shaw
Williamina Fleming
Annie Cannon

Erin Eva Butcher
Brenna Sweet
Marcus Hunter
Juliet Bowler
Cassandra Meyer

STAFF

Producer
Stage Manager
Tech Director
Set Designer
Costume Designer
Props Designer
Lighting Designer
Lighting Designer
Producer
Caitlin Mason
Amy Lehrmitt
Leigh Downes
Debra Reich
Cara Chiaramonte
E. Rosser
Lighting Designer
Lighting Designer
Pl Strachman

Lighting Designer
Sound Designer
Asst. Director
Dramaturgs

L. Rossel
PJ Strachman
Kyle Lampe
Lindsay Eagle
Joshua Platt

Elizabeth Singer Goldman

Dialect Coach
Carpenter
Electrician
Graphic Designer

Carpenter
Carpenter
Frederick Frank
Jake Scaltreto

Board Operator Elizabeth Yvette Ramirez

House Manager Kristen Heider

DIRECTOR'S NOTE

Silent Sky opens with Henrietta looking up at the night sky, and our gaze follows hers. Indeed, we are all looking up—and out beyond what we normally see to ask (or answer) questions, for many different reasons and in many different ways. We wonder what is next and what is possible. Full of fiery curiosity, Henrietta asks these questions and takes the steps to seek out the answers. Most of all, Silent Sky boldly asks: how is a life measured?

Silent Sky raises more questions than it answers—nothing about it is expected or stagnant; it pushes us to reconsider gender roles, scientific concepts, and our own expectations, all with poetic language and brilliant characters. This is a world where women spar with their tongues and challenge the status quo even while their opportunities are on the "corner of someone else's chance." Three of the five characters are based on historical scientists—Henrietta Swan Leavitt, Williamina Fleming, and Annie Jump Cannon. While these first three challenge Henri's mind, Margaret and Peter give us a sense of her heart.

Silent Sky lives in duality: indeed, playwright Lauren Gunderson calls it a "conversation between opposites:" science and religion, life and legacy, men and women, hearing and deafness, fantasy and reality, memories and historical facts. Perhaps what is most powerful about Silent Sky is that it suggests that both sides of dualities are vital in making discoveries: we have to, as Annie states, think about how we are thinking. As Whitman writes, all the charts and diagrams must be aligned with the gentle wonder of looking up in perfect silence at the stars. Indeed, Henri removes her hearing aid so as to immerse herself in the work, which gives her a heightened relationship with music, eventually leading to her great discovery. Wonder, science, and faith are what propel these characters forward.

Physics is not all wrapped up—the universe is ever expanding. So, too, is our understanding of science. Curiosity and wonder will get us there, but we have to look beyond the facts and figures, and outside of ourselves, to find it.

GLOSSARY OF TERMS

Prepared by Elizabeth Singer Goldman, Dramaturg

The Period-Luminosity Relation – Leavitt's groundbreaking discovery was to measure the period of a pulsating variable star (or Cepheid) in relation to the star's luminosity (or intrinsic brightness) to estimate the star's distance from earth.

Magellanic Clouds –Two dense conglomerations of starts and nebulae seen from the Southern Hemisphere, now known to be satellite galaxies of the Milky Way. It was while studying variable stars in the Small Magellanic Cloud that Leavitt discovered the period-luminosity of Cepheid variable stars. This has become one of the most important relations in determining distances to objects in the Universe.

Cepheid – A variable star that pulsates radially, producing predictable changes in brightness. The predictable nature of the pulsating can be read to measure cosmic distances. Leavitt's groundbreaking discovery was to read the relationship between period and luminosity (or length of time and brightness of the pulsating).

Period – The time span in which a variable star cycles through its brightness changes. **Luminosity*** – The intrinsic brightness of a star, or the total amount of energy it emits per unit of time.

Photographic Plates – Photographic plates were used in still photography and consisted of a glass plate coated with a light-sensitive emulsion of silver salts. Glass plates were far superior to film for research-quality imaging because they were extremely stable and less likely to bend or distort, especially in large-format frames for wide-field imaging. These plates are what Leavitt and her colleagues used to record stellar variability.

Parallax – The difference in apparent position of an object against its background when viewed from two separate vantage points. Astronomers use the parallax technique, observing the positioning of the object from multiple locations on Earth, to estimate its distance from Earth.

Magnitude – The brightness of an object, as judged by various standards over the centuries. The higher the number, the dimmer the appearance. Astronomers distinguish between "apparent" magnitude, or the way the object appears to earthly observers depending on its distance, and "absolute" magnitude, its intrinsic brightness (also referred to as luminosity).

Nebula* – At the start of this story, any blurred object in space; today, an enormous interstellar cloud of ionized gases.

Star Classifications – "Oh, Be a Fine Girl, Kiss Me." Stars are classified by their spectra (the elements that they absorb) and their temperature. There are seven main types of stars. In order of decreasing temperature, O, B, A, F, G, K, and M. This was Cannon's classification system.

Star Spanker – A fly swatter (too small to be an effective swatter, it was renamed "spanker") in which the mesh was replaced with calibrated star images for magnitude estimation. The handle of the spanker was held so that the star images aligned with the stars printed on the photographic plates. As Cannon explains in the play: "Align the spanker with a star. The matching dot indicates how bright the star is. Record the magnitude, position, date, and repeat..."

Supernova – The explosion of a supergiant star.

Great Refractor Telescope – A 15-inch telescope installed at Cambridge in 1847. For 20 years it was the largest telescope in the United States, the most significant American astronomical instrument and equal to the finest in the world. It formed the nucleus for development of the Harvard College Observatory.

*Sobel, Dava. The Glass Universe: How the Ladies of the Harvard Observatory Took the Measure of the Stars. New York: Viking, 2016.

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CAST BIOS

Erin Eva Butcher – Henrietta Leavitt

Erin returns to Flat Earth after her role as Grace Fryer in *Radium Girls*. Other credits include: *Sense and Sensibility* (Maiden Phoenix Theatre Company), *Greek* (Boston Lyric Opera), *Kerplop!*, *Lover's Quarrels*, *Hairy Tales* (imaginary beats), *Hookman* (Company One), *Uncle Vanya* (Apollinaire Theatre Company). Erin is the founder and Artistic Director of Maiden Phoenix Theatre Company, a Boston-based theatre company committed to telling stories about women, a professional costume stitcher/first hand by day, and a Renaissance woman who is thrilled to add Astronomy to her list of pursuits.

Brenna Sweet - Margaret Leavitt

Brenna is a Boston-based actor. Recently she has been seen in The Boston Theatre Marathon (I Don't Know, Company One), as July (Doris and Cleveland, Dixon Place, NY), as Emily (Rabbit, Hot Summers Productions), and as Vera (In the Wake of the Graybow Riots, Sleeping Weazel). She is also an Actor/ Facilitator for True to Life Training, touring camps, colleges, and Universities teaching communication skills. She graduated from Emerson College with a BFA in acting.

Juliet Bowler - Williamina Fleming

Favorite stage credits include Leontes in the IRNE-Nominated Winter's Tale, Tupolski in the award-winning The Pillowman, Our Miss Brooks, Rocket Man, Fishnet-Networks.Net, and Bully Dance. Film credits include Clear History, That's My Boy, and Candy from Strangers. Juliet is also an improviser and professional voice artist, serving as the voice of United Way Massachusetts, Dental Relaxation and Keep Local Farms. She's lent her voice to a variety of narrative pieces, from the acclaimed PBS documentary Hidden Warriors, to the animated short Kiss Me Quick, along with a variety of serialized dramas and videogames. As always, I love you Mom!

Marcus Hunter - Peter Shaw

Recent credits include *Peter and the Starcatcher* with Cape Repertory Theatre, *From The Sea to Somewhere Else*, which will be opening on the New York Fringe in summer 2017, and *Richard III* at the Grahamstown Theatre Festival in South Africa. He is a proudly sodden member of the ensemble of Sh!tfaced Shakespeare. Love to Monica for being the brightest spot in this galaxy.

Cassandra Meyer -Annie Cannon

Casssandra received her BA in performance from Northeastern University and has also studied at the Gaiety School of Acting in Dublin, Ireland. Previous credits include: A Midsummer Night's Dream (Arts After Hours), A Southern Victory (Vagabond Theater Group), The Winter's Tale (Maiden Phoenix), Henry V (Arts After Hours), Enigma Variations (Flat Earth Theatre), Burning Up The Dictionary (Vagabond Theatre Group), Twelfth Night (Arts After Hours), The Effect of Gamma Rays on Man-in-the-Moon Marigolds (Happy Medium Theater Company), Picasso at the Lapin Agile (Winthrop Playmakers) and the film Ascendants (Charles River Media Group). To L, always

STAFF BIOS

Cara Chiaramonte - Costume Designer

Cara is a visual artist and designer with a propensity for bright colors and weird, wordy theater. She escaped Bennington College's theater program, and has been working in the Boston scene since 2007. Outside credits include The Aurora Project (Science Fiction Theatre Company), Someone Who'll Watch Over Me (Bad Habit), Paper City Phoenix (Boston Actors Theater), Lebensraum (Hub Theatre), As You Like It, Dracula, and The Winter's Tale (Theatre@First), Human Contact and 2010: Our Hideous Future: The Musical! (Unreliable Narrator). See more of her work at carachiaramonte.com.

Leigh Downes - Tech Director

Leigh graduated from the RIT in 2009 with a BSEE-Tech and returned to Watertown to work as an AV Engineer. He's an alum of the Watertown Children's Theatre, WHS Drama Club, former RIT Players' President and treasurer, and advocate of deaf theater at the National Technical Institute for the Deaf at RIT. He has been working tech for live music, theater, and dance for over fifteen years, specializing in sound systems and set construction. He has been the Technical Director, Set Builder, and electrician for almost all of Flat Earth's productions, helping bring the cast and audience to a distant moon (On This Moon), a musical pirate ship (Pirate Lives!), a dusty attic starscape (Rocket Man), the icy southern pole (Terra Nova), and further.

Kyle Lampe – Sound Designer

Kyle has been designing sound waves for theater since his tenure as a student at UMass Amherst. After interning at the Huntington Theatre Company, he has worked on many Boston shows such as "Art" by the Hub Theatre Company, Planet of the Warrior Bunnies by Unreliable Narrator, and Flat Earth's Lovecraft's Tales Outside Time and Space.

Amy Lehrmitt - Stage Manager

Amy has been a member of Flat Earth since 2009, stage managed many Flat Earth productions, produced *The Pillowman, Rocket Man*, and *Tales of a Fourth Grade Lesbo*, and penned the radio adaptations *Lovecraft's Unnamable Tales* and *Lovecraft's Tales Outside Time & Space*. Her adaptation of "The Masque of the Red Death" was performed with the Post-Meridian Radio Players in *Tomes of Terror: Nevermore*. This June, she'll be producing Neil Labute's controversial *Fat Pig*, so keep an ear out! Ames resides in Medford with her boyfriend / company founder Jake and two cats named Jim.

Caitlin Mason – Producer

Caitlin is thrilled to be producing her second show with Flat Earth! Caitlin has been an area stage manager since 2011, and has worked on nine Flat Earth productions, in varying roles, since 2013. She looks forward to working on her tenth Flat Earth production later this year, when she'll be working as Assistant Director AND Sound Design on Neil LaBute's *Fat Pig.* Caitlin is a Company Member of Flat Earth Theatre, and is the Artistic Director of the Post-Meridian Radio Players (pmrp.org).

Debra Reich – Scenic Designer

Debra is happy to be working on her fifth Flat Earth Theatre project. She designed sets for *Blinders, Radium Girls, Rocket Man,* and *Pirate Lives! The Musical!* As always, it is a privilege to be involved with such a professional and talented group of people.

E. Rosser – Props Designer

E. moonlights as a freelance designer in the Boston theater scene, saving daytime for mundane things like engineering and science writing. She's thrilled to be back with Flat Earth! Among her favorite creations are 8-foottall giraffe puppets, hospital gowns (think "evening," not "surgical"), rococo zombies, drag queen metamorphoses, and various bits of steampunkery. See more of her work at machinationsbyrosser.weebly.com!

Dori A. Robinson - Director

Dori is an educator, director, dramaturg and playwright. She holds a Masters from New York University's Educational Theatre program, having focused on applied theatre, devised work with youth, and Shakespeare. Dori has worked at the New Victory Theatre, Steppenwolf, the Park Avenue Armory, the Theatre Development Fund, Trusty Sidekick, Timeline Theatre, Shattered Globe, the Massachusetts Center for Renaissance Studies, and the New York Student Shakespeare Festival. Directing credits include: The Merchant of Venice, Die Kleinen, The Lion in Winter, Extremities, Picnic, Into the Woods, The Pajama Game, Flight, and James and the Giant Peach (2016). Assistant Director credits include: Meet John Doe, Judgement at Nuremberg, The Chosen, Love's Labour's Lost, and The Three Sisters. Dramaturgy: Christmas on the Air (Stoneham Theatre), A Season in the Congo (Timeline Theatre), Macbeth (Looking for Shakespeare, NYU). Eleven of Dori's original plays have been produced in New York, Chicago, and Boston, including: The Great Harvest, The Principal Stream, Name of a Woman, and Six Wings to One. Special thanks to the entire Flat Earth Team.

PJ Strachman – Lighting Designer

PJ has recently designed Bad Habit's How Soft the Lining, A Man of No Importance, Speech and Debate, Six Degrees of Separation, The Goat or, Who Is Sylvia, Orlando, Translations, and Top Girls, Gloucester Stage Company's Every Christmas Story Ever Told and Dueling Divas, Unreliable Narrator's Ultimate Things, Wax Wings' The Man from Willow's Brook, Kevin Cirone's Creative License, Whistler in the Dark's After-Dinner Joke, Our Country's Good, Vinegar Tom, Ted Hughes' Tales from Ovid, and Dogg's Hamlet, Cahoot's Macbeth (Hubby Award, Best Design), F.U.D.G.E.'s Merrily We Roll Along, City of Angels, Jack the Ripper, Assassins, and Spring Awakening (IRNE nomination, Best Lighting), Blue Spruce's Faerie Tales, Once on This Island (BroadwayWorld.com winner, Best Lighting Design) and Hedwig and the Angry Inch, imaginary beasts' Macbett, and many other area shows. She is the regular designer for Gann Academy and Stonehill College, including two ACTF regional selections. Her next project is The Real Inspector Hound and Play On! by Bad Habit Productions at the Boston Center for the Arts. Photos of her work can be seen at www.pjelex.com.

ABOUT THE PLAYWRIGHT

Lauren M. Gunderson is the most produced living playwright in America of 2016, the winner of the Lanford Wilson Award and the Steinberg/ATCA New Play Award, a finalist for the Susan Smith Blackburn Prize and John Gassner Award for Playwriting, and a recipient of the Mellon Foundation's 3-Year Residency with Marin Theatre Company. She studied Southern Literature and Drama at Emory University, and Dramatic Writing at NYU's Tisch School where she was a Reynolds Fellow in Social Entrepreneurship. Her work has been commissioned, produced and developed at companies across the US including South Coast Rep (Emilie, Silent Sky), The Kennedy Center (The Amazing Adventures of Dr. Wonderful And Her Dog!), The O'Neill, The Denver Center, San Francisco Playhouse, Marin Theatre, Synchronicity, Olney Theatre, Berkeley Rep, Shotgun Players, TheatreWorks, Crowded Fire and more. She co-authored Miss Bennet: Christmas at Pemberley with Margot Melcon. Her work is published at Playscripts (I and You, Exit Pursued By A Bear, The Taming, and Toil And Trouble), Dramatists (Silent Sky, Bauer, Miss Bennet) and Samuel French (*Emilie*). Her picture book *Dr* Wonderful: Blast Off to the Moon will be released from Two Lions / Amazon in May 2017. LaurenGunderson.com and @LalaTellsAStory.

FLAT EARTH'S MISSION

I lat Earth Theatre crafts experiences that challenge the worldview of both artist and audience. Through evocative, intimate staging and visceral, intelligent performances, we inspire the community to question their preconceived notions and expand their perspective. We stage productions of neglected and underperformed scripts, as well as new and in-development pieces, and conceive unique takes on more conventional works. Flat Earth Theatre thrives in its egalitarian approach, engaging the diverse ideas and skills of its company members and collaborators to create thought-provoking theatre that informs and entertains.

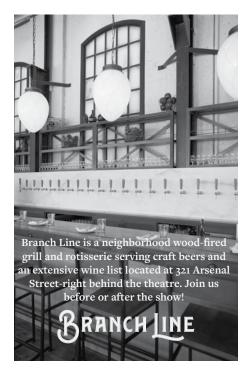
To learn more about Flat Earth and our upcoming projects, visit *flatearththeatre.com*.

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We need your feedback! Please complete our audience survey to let us know about your experience. It only takes a couple of minutes, and your responses will help us evaluate and refine our process. Fill it out on paper, or online! Scan the QR code to take the survey, or visit flatearththeatre.com/survey.

SPECIAL THANKS

The Church of the Good Shepherd The Mosesian Center for the Arts Boston Light & Sound Larry Shaw **Emerson College** Ron DeMarco Stoneham Theatre Ben Jamieson Tim Hoover Shana Burstyn Marylou Maeder Harvard College Observatory Lindsay Smith Dava Sobel Elizabeth Hunter Theatre@First



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Robin Gabrielli

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