

Caltech | Alumni

EXPLORING PATAGONIA & THE SKIES OF THE SOUTHERN HEMISPHERE

November 1–15, 2022

FEATURING

Caltech Professor

FIONA HARRISON

CALTECH DEPARTMENT OF
PHYSICS, MATH & ASTRONOMY

**WITH OPTIONAL
EXTENSIONS TO**

Rapa Nui (Easter Island)

OCTOBER 27–NOVEMBER 2, 2022

Iguazú Falls

NOVEMBER 14–18, 2022



DEAR CALTECH ALUMNI AND FRIENDS,

Behold the Southern Hemisphere's dazzling evening skies on an exclusive expedition to Chile and Argentina with Fiona Harrison, PhD, Caltech professor. Caltech Alumni Association is partnering with UCLA Alumni to go behind the scenes to meet astronomers who are peering deeper into the universe than ever before. Through special permission, we'll see the Vera C. Rubin Observatory with the world's largest digital camera fabricated for optical astronomy, the Gemini South 8.1-meter telescope, and the SOAR 4.1 telescope. We'll also enjoy a private entry to see Las Campanas Observatory where the Giant Magellan Telescope is being built, which will have a higher resolution than the Hubble or Webb Space Telescopes. In the evening, we'll travel to El Pangué Observatory in Vicuña to view the pristine skies.

Our adventure continues as we travel to the Swiss-like town of Pucón in the Andean foothills of Chile's Lake District. Here we'll enjoy a full-day excursion to the Villarrica Volcano then cross through a mountain pass and monkey puzzle tree forest to San Martín de Los Andes. Spend the day exploring the UNESCO World Heritage site of Lanín National Park. Next, drive the scenic "Route of the Seven Lakes" to the alpine town San Carlos de Bariloche with stunning views of Lake Nahuel Huapi and the Andes. Our tour ends in cosmopolitan Buenos Aires where we'll enjoy a tango show, visit the Galileo Galilei planetarium, and tour the city's varied and colorful neighborhoods.

For those wishing to extend their stay, a pre-trip to Rapa Nui (Easter Island) is offered as well as a post-trip to Iguazu Falls.

Cordially,



Ralph Amos
President & CEO Caltech Alumni Association

For information, visit www.alumni.caltech.edu/travel or contact info@alumni.caltech.edu.



CALTECH STUDY LEADER

Fiona A. Harrison

Fiona A. Harrison, the Harold A. Rosen Professor of Physics and the Kent and Joyce Kresa Leadership Chair, Division of Physics, Mathematics and Astronomy, has been on the Caltech faculty for more than 25 years.

Harrison's impressive research is divided between developing new optics and detectors for high energy astrophysics and studying energetic phenomena such as gamma-ray bursts, black holes, and supernovae. As the Principal Investigator of the Nuclear Spectroscopic Telescope Array (NuSTAR), the first focusing telescope to view the Universe in the high energy X-ray band, Harrison is working with JPL and an international team to build NuSTAR, launch it into orbit, and share their findings.

NuSTAR will make maps of extragalactic fields, the Galactic center region, young supernova remnants, and even the Sun with sensitivity more than 100 times better than any instrument flown in this energy range. When NuSTAR is launched, Harrison plans to provide research opportunities for students interested in combining state-of-the-art instrumentation with observations.

Harrison's extensive knowledge of high energy astrophysics and phenomena, combined with her firsthand understanding of the mechanics and engineering of an optical telescope, along with her time working with both Caltech and JPL, makes her an ideal leader for an exploration of the skies over the Southern Hemisphere.

FLORALIS GENÉRICA,
BUENOS AIRES



VERA C. RUBIN OBSERVATORY AT SUNSET



GAUCHO WITH COWS AND LANÍN VOLCANO
IN THE BACKGROUND, PATAGONIA, ARGENTINA



TANGO DANCERS

TUESDAY, NOVEMBER 1

U.S. / Santiago

Depart from your home city on an overnight flight to Santiago the capital of Chile. (MEALS ALOFT)

WEDNESDAY, NOVEMBER 2

Santiago / La Serena

We arrive this morning in Santiago and take a morning flight to La Serena, home to some of the world's most advanced telescopes. Transfer to our hotel overlooking the ocean. This evening we'll gather for a festive welcome dinner. HOTEL CLUB LA SERENA (D)

THURSDAY, NOVEMBER 3

**Gemini South, SOAR,
and Vera C. Rubin
Observatories**

Spend the morning with exclusive visits to the Gemini South Telescope, Southern Observatory for Astrophysical Research (SOAR), and the Vera C. Rubin Observatory all located on the peak of Cerro Pachon, an 8,900-foot-high mountain in northern Chile. The Gemini Observatory is an 8.1-meter telescope and the adjacent SOAR a 4.1-meter aperture telescope. The Vera C. Rubin Observatory, currently under construction, is an 8-meter-class telescope coupled to a 3.2 gigapixel camera—the world's largest digital camera ever fabricated for optical astronomy. All visits are pending final confirmation. This evening, we will observe the night skies at El Pangue Observatory using powerful premium amateur telescopes.

HOTEL CLUB LA SERENA (B, L, D)

FRIDAY, NOVEMBER 4

**Magellan Project /
Las Campanas
Observatory / Santiago**

We'll travel north of La Serena by road to Las Campanas Observatory in the Chilean Andes for a day-long tour of the Magellan Project site and the two 6.5-meter optical telescopes that are housed there. We'll see the Giant Magellan Telescope (GMT) construction site, which is scheduled to be completed in 2027. The GMT will use seven of the world's largest mirrors as primary mirror segments, each approximately 8.42 meters (27.61 ft) in diameter and have a higher resolution than the Hubble or Webb Space Telescopes. Visits are subject to final confirmation. We fly this evening to Santiago.

PLAZA EL BOSQUE EBRO OR SIMILAR (B, L)

SATURDAY, NOVEMBER 5

**Santiago / Temuco
/ Pucón**

This morning, we'll fly south to Temuco and transfer to Pucón, a small town embedded in the Andes foothills. A city tour will introduce us to Pucón and Villarrica located on the shores of Lake Villarrica and the snowcapped Villarrica Volcano. After dinner, we'll enjoy the evening at a thermal hot spring. HOTEL PUCÓN GREEN PARK (B, L, D)

SUNDAY, NOVEMBER 6

Pucón

We'll enjoy a full-day excursion to Villarrica Volcano and Lagoon. A walk at the base of Volcano Villarrica will give us a beautiful

view over the lakes Villarrica, Colico, Caburgua, and Calafquén.

HOTEL PUCÓN GREEN PARK (B, L)

MONDAY, NOVEMBER 7

**Pucón / San Martin
de Los Andes**

We'll cross from Chile through a mountain pass and an Araucaria (commonly called the monkey puzzle tree) forest into Argentina. Unique to Chile and Argentina, each monkey puzzle tree could be up to a thousand years old. They haven't changed much in over 200 million years when dinosaurs roamed the earth. We'll arrive in San Martin de los Andes, a charming town in a beautiful setting on the edge of Lago Lacar, with attractive chalet-style architecture. LOI SUITES HOTEL CHAPELCO (B, L, D)

TUESDAY, NOVEMBER 8

San Martin de Los Andes

This morning, we'll travel to Quila Quina a village located on the shore of Lacar Lake. Here we'll embark our boat and sail through Lacar and Nonthue Lake to reach the Hua Hum River. We'll pass through Paraje Trompul where a Mapuche community lives. Once in Nonthue Lake, we will disembark and walk through a trail to reach Chachin waterfall that has a drop of almost 100 feet. Back onboard our boat, we will continue the trip towards Hua Hum River. During our return, we will make our last stop at Quila Quina dock to have lunch while we enjoy the wonderful view of Lacar Lake. We will return to San Martin de los Andes Pier after lunch.

LOI SUITES HOTEL CHAPELCO (B, L, D)

WEDNESDAY, NOVEMBER 9

San Martin de Los Andes

We'll depart on an exploration of Lanín National Park, a UNESCO World Heritage Site located in the Andes in the province of Neuquén. A true hiker's paradise, Lanín National Park is famous for its incredible biodiversity and the wide variety of species to be found within its borders, such as pudú (a kind of small deer), Andean condor, trout, etc. The majority of the park is covered with huge forests of conifers, amongst which are some splendid Araucaria or monkey puzzle trees. The park is also home to a population of indigenous Mapuche people, who are responsible for managing and maintaining it.

LOI SUITES HOTEL CHAPELCO (B, L)

THURSDAY, NOVEMBER 10

San Martin de Los Andes / Bariloche

We'll enjoy a magical drive along the Seven Lakes Road that winds its way through forested valleys, snow-capped mountains, abundant waterfalls, and around azure lakes and links the town of San Martin de los Andes with Bariloche. In the evening, we'll enjoy a stargazing party to learn more about the skies of the Southern Hemisphere. Several amateur telescopes will be set up for observations.

DESIGN SUITES BARILOCHE HOTEL (B, L)

FRIDAY, NOVEMBER 11

Bariloche

This morning we'll travel just outside of Bariloche to Cerro Campanario, which stands more than 1,000 meters above the city. Here we'll take a chairlift to the top to enjoy 360-degree panoramic views of the area. From this viewpoint, we can see Lake Nahuel Huapi and the snow-capped Andes. Next, we'll stop at Cervceria Patagonia located at the base of Cerro Lopez that offers its artisanal beers together with phenomenal views of Lake Nahuel Huapi and the Andes Mountains.

DESIGN SUITES BARILOCHE HOTEL (B, L)

SATURDAY, NOVEMBER 12

Bariloche / Buenos Aires

Depart this morning on a flight to Buenos Aires. In the afternoon, we'll visit the Galileo Galilei planetarium with its huge 20-meter dome located in the Palermo district of the city. LOI SUITES RECOLETA HOTEL (B, BOX LUNCH)

SUNDAY, NOVEMBER 13

Buenos Aires

After breakfast, we'll explore the Natural History Museum in La Plata. We'll focus on the museum's collection of large mammal fossils from the third and fourth periods of the Cenozoic Era, fossils found in the Pampas region of northern Argentina. In the evening, we'll gather for dinner and then enjoy a tango performance at Gala Tango, one of the most authentic tango venues in Buenos Aires.

LOI SUITES RECOLETA HOTEL (B, L, D)

MONDAY, NOVEMBER 14

Buenos Aires / U.S.

In the morning, we'll explore Buenos Aires and its iconic neighborhoods, including Plaza de Mayo, the National Cathedral, and Casa Rosada (the Presidential Palace). We'll see La Boca with its colorful tin houses and walk along the mythical street of Caminito. We'll then explore bohemian San Telmo, one of the oldest neighborhoods in Buenos Aires, and tour Puerto Madero formerly the port area of the city. We'll head north and stop at San Martin Square, surrounded by elegant French architecture. We end our tour in the traditional neighborhood of Palermo strolling along its large parks, rose gardens, and lakes, and enjoy a festive farewell lunch. This afternoon, we'll transfer to the international airport for a flight back to the U.S. and home. OVERNIGHT FLIGHT (B, L)

TUESDAY, NOVEMBER 15

Arrive Home to U.S.

Arrive this morning in the U.S. and connect to your home airport.



OPTIONAL PRE-TRIP EXTENSION

Rapa Nui (Easter Island)

OCTOBER 27–NOVEMBER 2, 2022

Located 2,600 miles west of Santiago in the South Pacific Ocean, this mysterious island has a visual impact few places in the world can equal. Hundreds of moais, tight lipped basalt statues unique in the whole of Oceania, are scattered throughout the island. Accommodations on Rapa Nui are at The Nayara Hangaroa, which is known for its environmental design. The extension includes one night at Plaza El Bosque Ebro on arrival, one night at the Holiday Inn Airport Hotel on your return from Rapa Nui and three nights at the Nayara Hangaroa on Rapa Nui, all excursions, breakfast in Santiago on return, all excursions, entrance to Rapa Nui National Park, breakfast in Santiago and all meals and an open bar while at the Hangaroa, and transfers. Tips to guides and staff on Rapa Nui are at the passenger's discretion. Rates are based on a minimum of eight guests. Airfare to Rapa Nui is not included.

OPTIONAL POST-TRIP EXTENSION

Iguazú Falls

NOVEMBER 14–18, 2022

Roaring out of the jungle and hurtling over cliffs between Brazil and Argentina, Iguazú Falls is one of the natural wonders of the world. The two nights at this extraordinary place offer ample time to relax and see cataracts surrounded by luxuriant rain forest, beautiful exotic birds (toucans, caracaras, and parrots), and intriguing bromeliads and butterflies. Walk along the upper and lower trails for close-up views of the many different falls. Take a boat approaching the base of the falls. The extension includes three-nights' accommodations (taxes included) buffet breakfast every day, one lunch, entrance fees, transfers, and local guides. Airfare to Iguazú is additional and quoted separately. Accommodations: One-night Loi Suites Recoleta Buenos Aires; Two nights Loi Suites Iguazú. Rates are based on a minimum of eight guests.



SAN MARTIN DE LOS ANDES

VERA C. RUBIN
OBSERVATORY



WHAT TO EXPECT

This exclusive expedition is designed for Caltech Alumni and friends who are interested in learning about astronomy as well as the history, culture, wildlife, geology, and superb natural landscapes of Chile and Argentina. Walks will be from one to two miles and at times over rocky, dusty, and uneven terrain and at high elevations. The visits to the Vera C. Rubin, Gemini, and SOAR observatories are at approximately 8,737 feet and the Las Campanas Observatory is at approximately 7,810 feet (all pending final confirmations). Travel is during the Southern Hemisphere's Spring. Average temperature ranges are as follows: Santiago, 80°F to 49°, La Serena, 67°F to 53°F, Pucón, 62°F to 38°F, Bariloche and San Martin de los Andes, 65°F to 38°F, and Buenos Aires, 76°F to 62°F. This is a relatively active program with some early departures and drives up to four hours. To enjoy this experience, participants must be in good physical and mental health and be able to keep up with the pace of the group. Travelers should be able to walk unassisted up to two miles a day. There will be some stair climbing and unpaved trails over uneven terrain and cobblestone sidewalks. Since some travel will be in remote areas, everyone must be flexible concerning time schedules, food, insects, weather, and dust. The order of activities may change due to local conditions or to take advantage of unexpected opportunities. Program participants requiring extraordinary assistance must be accompanied by someone who can and will provide all required assistance. Travel is by jet aircraft, boat, and motorcoach.

PROGRAM COST INCLUDES

All accommodations and meals as specified in the itinerary • Wine with welcome dinner and farewell lunch • In-tour flights within Chile and Argentina (Santiago / La Serena; Santiago / Temuco; and Bariloche / Buenos Aires) provided increases in the in-tour airfare (\$425 per person) after the initial pricing of this program are not included • All activities per itinerary • Professional English speaking guides and tour director throughout • Transportation by private motorcoach and boat • Airport transfers for group flights • Tips to local guides and drivers • Service charges and taxes • Baggage handling • Entrance fees • Pre-departure information • Coordination and administration.

PROGRAM COST DOES NOT INCLUDE

U.S. domestic and international airfare (quoted separately) • Flights for the option pre-trip to Rapa Nui or post-trip to Iguazú Falls • Excess baggage charges • Meals not specified in the itinerary • Personal items such as laundry, email, fax, wi-fi, or telephone calls • Alcoholic beverages except those mentioned above • Dishes or beverages not included with meals • Room service • Passport fees • Private transfers • Medical expenses • Travel insurance • Optional extensions or deviations from the scheduled tour • Any increases in the in-tour airfare (included as part of the main program-see above), security or fuel surcharges imposed after the initial costing of this program are not included. • Tip to the tour director is at passengers' discretion.

LAND PROGRAM COST

(Per person, double occupancy)\$9,995

SINGLE SUPPLEMENT

(Limited availability)\$1,695

SAMPLE COACH AIRFARE

(As of January 2021, and subject to change)

LAX / Santiago /
Buenos Aires / LAX\$1,300

RAPA NUI (EASTER ISLAND) PRE-TRIP EXTENSION

(Per person, double occupancy)\$3,350

Rapa Nui Extension
Single Supplement.....\$675

Roundtrip airfare to Rapa Nui\$690
(As of January 2021, and subject to change)

IGUAZÚ FALLS POST-TRIP EXTENSION

(Per person, double occupancy)\$1,645

Iguazú Extension
Single Supplement.....\$395

Roundtrip airfare
from Buenos Aires to Iguazú\$153
(As of January 2021, and subject to change)

GENERAL INFORMATION

RESERVATIONS, DEPOSITS & FINAL PAYMENT: To reserve your space on this program, a \$1,000 deposit is required per person. Please fill out and mail, e-mail, or fax the registration form. Deposits may be charged to a credit card. Reservations are acknowledged in order of receipt. Final payment is due July 25, 2022, and must be paid by check. Royal Adventures handles all invoicing. CST #2009579-40

CANCELLATIONS AND REFUNDS: Cancellations must be received in writing by the Caltech Alumni Association from the participant. Cancellations received before July 25, 2022, will receive a full refund. Cancellations received on or after July 25, 2022, are subject to a 100% penalty of all deposits and payments, regardless of booking date. There are no refunds for unused meals, accommodations, or other trip features.

CHANGES IN ITINERARY: The itinerary is subject to change at the discretion of Royal Adventures.

RATES: Tour costs are based upon current airfares, tariffs, and currency values. While we do everything possible to maintain the listed prices, they are subject to change.

INSURANCE: We highly recommend the purchase of trip cancellation insurance. Information about insurance will be provided upon confirmation. "Cancel for Any Reason" insurance coverage must be purchased within 14 days following the date of trip confirmation.

RESPONSIBILITY: Royal Adventures, its owners, and employees act only as agents for the various independent suppliers and contractors providing transportation, hotel accommodations, restaurant, and other services connected with this tour. Such travel and services are subject to the terms and conditions under which such accommodations, services, and transportation are offered or provided, and Caltech Alumni Association and Royal Adventures and their respective, employees, agents, representatives, and assigns, accept no liability, therefore. Caltech Alumni Association and Royal Adventures assume no liability for any injury, damage, loss, accident, delay, or other irregularity that may be caused by the defect of any aircraft or vehicle or the negligence or default of any company or person engaged in carrying out or performing any of the services involved. Additionally, responsibility is not accepted for losses, injury, damages, or expenses of any kind due to sickness, epidemics, pandemics, pathogens, weather, strikes, local laws, hostilities, wars, terrorist acts, acts of nature, quarantine, *force majeure* event, animal or insect bites, or other such causes. All services and accommodations are subject to the laws of the country in which they are provided. If this tour is canceled due to a *force majeure* event or

other forces beyond our control only the recoverable portion of unused services or accommodations if any will be refunded or credited on a future Royal Adventures tour. A *force majeure* event, in relation to this tour, shall mean any circumstances beyond our control, including, but without limitation, to acts of God, explosion, flood, forceful wind, fire or accident, war or threat of war declared or undeclared, acts of terrorism, sabotage, insurrection, riots, strikes, civil disturbance, sickness, epidemics, pandemics, quarantines, government intervention or other unforeseeable events. Limitations on travel arising from the COVID-19 pandemic or other pathogens shall be considered a *force majeure* event. Caltech Alumni Association and Royal Adventures reserve the right to make changes in the published itinerary or to the study leaders whenever, in their sole judgment, conditions warrant, or if they deem it necessary for the comfort, convenience, or safety of the tour participants. They reserve the right to withdraw this tour without penalty. The right is also reserved to decline to accept or retain any person as a member of the tour or to substitute another qualified leader or special guest. Baggage and personal effects are the sole responsibility of the owners at all times. The price of the program is given in good faith based on current tariffs and rates and is subject to change. Any tariff, exchange rate, airfare, or fuel increases will be passed onto participants. Neither Caltech Alumni Association nor Royal Adventures accepts the liability for any airline cancellation penalty incurred by the purchase of a nonrefundable airline ticket or any other expenses incurred by tour participants in preparing for the tour. The air ticket when issued shall constitute the sole contract between the passenger and the airline concerned. As part of the consideration and right to participate in this tour, each participant will be asked to sign a liability release. There are no refunds for unused meals, accommodations, or other trip features. I will not hold the Caltech Alumni Association or Royal Adventures and/or its employees or agents responsible for any expense or loss caused by my/our failure to purchase trip cancellation and evacuation insurance coverage. As part of the consideration and right to participate in this tour, each participant will be asked to sign a liability release, assumption of risk, and hold harmless agreement.

DISCLAIMER: Every reasonable effort has been made to ensure the accuracy of the information presented in this publication. Neither the Caltech Alumni Association nor Royal Adventures is responsible for errors in or damages resulting from the use of the information contained herein. Information contained in this brochure is subject to change.

QUESTIONS: Please contact Caltech Alumni Travel at info@alumni.caltech.edu for details.

Caltech | Alumni

SCAN HERE
TO REGISTER
ONLINE



RESERVATION FORM

EXPLORING PATAGONIA

November 1–15, 2022

Enclosed is a deposit of _____ \$1,000 deposit per person, (plus \$200 per person for the Rapa Nui (Easter Island) pre-extension and \$200 per person for the Iguazú Falls post-extension, if applicable) to hold _____ place(s) on Exploring Patagonia.

Space still available. Full payment will be due at time of booking. Please authorize credit card payment or make a check payable to Royal Adventures, and send along with completed reservation form to: 9 Crown Canyon Court, Suite 205, San Ramon, CA 94583.

Or contact Royal Adventures at 1-800-453-4754; fax 925-855-1909; or e-mail armando@royaladventures.com.

Scan the QR code above or log on <https://royaladventures.intellibook.co/site/#/caltech.exploring.pat.22> to register online.

NAME AS ON PASSPORT _____ DATE OF BIRTH _____

NAME AS ON PASSPORT _____ DATE OF BIRTH _____

CONTACT INFORMATION

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

HOME PHONE _____ CELL PHONE _____

E-MAIL(S) _____

PAYMENT OPTIONS

☐ Pay by check made out to "Royal Adventures"

☐ Please charge my deposit for the total amount of \$_____

☐ AMEX ☐ Visa ☐ MasterCard ☐ Discover Card
(a 3% credit-card processing fee will be added)

☐ Please charge the deposit of \$_____ (\$1,000 per person) to:

CARD # _____

EXP. DATE _____ SEC. CODE _____

ACCOMMODATIONS

☐ 2 separate beds ☐ 1 bed

☐ I will share a room with _____

☐ I request a single room (limited availability)

PRE & POST -TRIP EXTENSIONS

☐ I/We will join the optional pre-trip extension to Rapa Nui (Easter Island).

☐ I/We will join the optional post-trip extension to Iguazú Falls.

I/We have carefully read the Program Costs, General Information and Responsibility sections of this brochure and agree to their terms on behalf of myself and of my party named above.

SIGNATURE _____ DATE _____

SIGNATURE _____ DATE _____

TOP & BOTTOM:
VIEWS OF THE ANDES MOUNTAINS
AND THE LAKES OF BARILOCHE

EXPLORING PATAGONIA & THE SKIES OF THE SOUTHERN HEMISPHERE

November 1–15, 2022

FEATURING

Caltech Professor of Physics

Fiona Harrison

HIGHLIGHTS

GO BEHIND-THE-SCENES with special entry to some of the most advanced observatories in the world.

OBSERVE THE SOUTHERN HEMISPHERE skies through amateur telescopes in the dark areas of **LA SERENA** and **BARILOCHE**.

DRIVE the Road of Seven Lakes and through an Andes Mountain pass, on one of Patagonia's ultimate scenic road trips.

EXPLORE the Swiss-like towns of San Martín de los Andes and Bariloche.

SPEND a day at Lanín National Park & Arucarias Forest, a **UNESCO WORLD HERITAGE** site and navigate Lacar Lake.

TOUR cosmopolitan **BUENOS AIRES**, the Paris of South America. **ENJOY** an authentic tango show.

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