

NAPAC

2022

North American

Particle Accelerator Conference

Albuquerque, New Mexico, USA

7–12 August 2022

Hotel Albuquerque

CONFERENCE GUIDE BOOK



Welcome to the 2022 North American Particle Accelerator Conference and the heart of New Mexico, a confluence of Indigenous, Spanish, and American influences as evidenced in the state's unique cuisine, music, and architecture.

Held every three years, NAPAC is distinct from the larger International Particle Accelerator Conference. Whereas the latter might have more than 1,000 participants, the NAPAC typically hosts 300-400 participants, thus offering a much more personal feel without sacrificing the world class science, technology, and engineering. The format also lends itself well to mini courses in a wide range of topics, and its regional nature allows for broader participation from North American students. As the largest domestic particle accelerator conference, NAPAC brings together experts in all fields of accelerator science, technology, and engineering. Because it covers the entire spectrum of accelerator STE topics, it is extremely useful for students, post-docs, technicians, and engineers. Attendees can be exposed to the entire field and interact with many of its best in one place. The conference is being held in the beautiful Hotel Albuquerque, in the city's historic Old Town neighborhood. Many attractions, shops, and restaurants are within walking distance of the hotel. If you want to explore further, consider the short, picturesque train ride to Santa Fe, the nation's highest and oldest state capitol. An easy walk from the train station brings you to the famous Santa Fe Plaza. Whatever your interests, we believe you will truly enjoy your stay in the Land of Enchantment—and discussing accelerators, of course.

Stephen Milton, Conference Chair
Sandra Biedron, Scientific Program Chair
Louis Peterson, Local Organizing Committee Chair

TABLE OF CONTENTS

Welcome Letter.....	ii
Table of Contents.....	iii
Conference Venue.....	1
Conference Registration / Information Desk.....	1
Welcome Reception.....	1
Breaks and Lunches.....	1
Conference Banquet.....	1
Internet & Wireless Service.....	1
Companions Visiting Santa Fe.....	1
Emergency Services.....	2
Climate, Weather and Altitude.....	2
Sales Tax.....	2
Food and Drink.....	2
Red vs. Green.....	2
Information for Speakers and Presenters.....	3
Instructions for Poster Presenters.....	3
Hotel Albuquerque Map.....	4
Old Town Area Map.....	5
Albuquerque Old Town Restaurants Map.....	6
Restaurant List and QR codes.....	7
Sponsors.....	9
Exhibitors.....	10

GENERAL INFORMATION

CONFERENCE VENUES

All conference events are at the Hotel Albuquerque

CONFERENCE REGISTRATION/INFORMATION DESK

Registration materials (e.g., conference badges) will be available at the registration desk located in the main foyer of the Hotel Albuquerque.

Sunday, August 7	3:00 – 6:00 PM
Monday, August 8	7:00 – 6:00 PM
Tuesday, August 9	7:00 – 6:00 PM
Wednesday, August 10	7:00 – 6:00 PM
Thursday, August 11	7:00 – 12:00 PM

WELCOME RECEPTION - Sunday, August 7, 4:30 to 6:30 PM

You are invited to join us at a Welcome Reception on Monday at the Hotel Albuquerque Juniper Garden/Pavilion Court yard. Festivities will include cash bar, drinks and hors d'oeuvres. This event is free for a single companion per registrant.

BREAKS AND LUNCHESES

A breakfast concession stand with a variety of offers such as breakfast burritos, sandwiches, yogurts etc will be able from 6:30 to 10 AM in the West/North Atrium area.

The Sawmill Market across the street from Hotels Albuquerque and Chaco offers a variety for food venues for lunch and dinner. Additional restaurants are list on pages 6-8.

CONFERENCE BANQUET - Thursday August 11

Please join us for the NAPAC2022 Conference banquet at the Alvarado Ballroom on Thursday night. The program begins with cocktails at 6 PM . After dinner we will enjoy entertainment by the Flamenco Dancers from National Institute of Flamenco. We will round out the evening with music and dancing. Companion tickets can be purchased at the registration area right up to the day of the event.

Dress code—All invited, suggested business attire up to black tie if you wish

INTERNET & WIRELESS SERVICE

Hotel Albuquerque provides free wifi services.

COMPANIONS VISITING SANTA FE

Companions are encouraged to participate in our morning meet and greet, Monday morning at 9:00 AM in the “Fireplace room”. This is designed to bring together companions to learn about near by Old Town attractions. A Concierge representative will on-hand to show companions all the great activities Old Town Albuquerque has to offer, including museums, historical sites, outdoor attractions and places to hang out and relax.

LOCAL INFORMATION

EMERGENCY SERVICES

In general, emergency services (medical, police, fire) can be contacted by dialing 911 from any public phone. Dialing 911 from a cell phone can, in certain circumstances, result in the call being routed to an inappropriate (e.g. non-local) response center. If this happens, the local Albuquerque numbers are:

Albuquerque Police Dispatch	(505) 242-2677 (COPS)
Albuquerque Fire Department	(505) 833-7390—Non-Emergency
Albuquerque Medical:	contact Police Dispatch and request medical services

CLIMATE, WEATHER AND ALTITUDE

Albuquerque, NM, is at an elevation of 1615 m (5300 ft). August daytime high temperatures average approximately 32° C (89° F), while night-time temperatures can fall to approximately 17° C (63° F). The humidity is generally low. Sunny days with blue sky are generally common in the summer; however, brief but intense rain showers and thunderstorms can happen, especially in the afternoon and evening, and these can cause big temperature changes. We recommend dressing in layers to accommodate these temperature swings.

It is very easy for new visitors to the Albuquerque area to become dehydrated, especially when engaged in outdoor activities. We recommend bringing a bottle of water with you on any excursions, and to make a conscious effort to drink more than your usual amount of water while visiting. For those who wear contact lenses, we recommend having a bottle of lubricating eye drops with you at all times. Visitors should also use sunblock with a high SPF for skin protection. UV rays are stronger at higher altitudes.

There are some specific physiological effects a new visitor to high-altitude areas may experience, especially if they usually live at or near sea level; these can include mild shortness of breath with normal exertion (such as brisk walking or jogging), increased heart rate, waking in the morning with headaches that quickly fade, and increased sensitivity to alcohol. (We mention these effects for reference, but emphasize that we are not medical professionals, and urge you to seek medical advice if you have specific concerns.)

SALES TAX

The combined sales tax rate for Albuquerque, New Mexico (total of state, county and city sales taxes) is currently 7.75% for most non-grocery items. As is customary in the US, this is generally not included in the price displayed in stores, but is added to your bill upon checkout.

FOOD AND DRINK

Albuquerque tap water is safe to drink. (Drink lots – dehydration is unpleasant.) Food from street vendors is safe to eat.

As is customary in the US, a gratuity/service charge (or tip) is generally not included in restaurant prices; neither is sales tax. Your bill should contain a summary of the prices for each item you order, the sales tax, and the total. Please note that some restaurants automatically add a gratuity for groups of six or more; if a gratuity has been added it will appear as an itemization on your bill. Gratuities for restaurant service in the US typically range from 10 – 20%, depending upon your judgment of the level of service provided.

RED vs GREEN

Restaurant patrons in New Mexico are frequently asked the question, “Red or Green?” Your waiter is asking whether you would like red or green chile sauce on your dish. Depending on your palate, adventuresomeness, and pain threshold, you may wish to ask your waiter for guidance regarding which is hotter, as this varies by restaurant as well as the season. Answering “Christmas” indicates you want a mixture of red and green chile sauce. If you do not want any chile sauce on your meal, we recommend requesting either red or green, but “on the side.”

INFORMATION FOR SPEAKERS AND PRESENTERS

Proceedings

The Conference Proceedings will be published electronically by JACoW. Both Tutorial and Invited Oral proceedings can be up to five pages long. Papers for both contributed oral and poster proceedings can be up to three pages long. If contributions contain numerous references, these may be carried over to an extra page. To ensure consistency of the conference proceedings, all papers must meet formal criteria as specified by JACoW. Guidelines, and the required template (in .docx and .tex formats) can be found at <https://www.jacow.org/Authors/HomePage>.

The deadline for submitting a proceedings contribution is Tuesday, August 2, 2022.

Submission is through: <https://spms.kek.jp/pls/napac22/profile.html>.

Authors are requested to check the status of their submissions via the status board or at <https://spms.kek.jp/pls/napac22/profile.html>:

- Green: Submission has been accepted for publication; no additional effort is required.
 - Yellow: Significant changes have been made; verification by the author is requested.
- At the end of the conference, yellow will convert to green, and the submission will be published with the editors' changes.
- Red: Author is required to make significant changes to meet JACoW requirements.

An email will contain guidance. Without resubmission by the author that resolved the identified issues, the paper will not be published.

The proceedings office is located in the Turquoise Room.

Oral Sessions

All oral sessions will be in Alvarado D or Alvarado E salons. Speakers need to upload their presentation at least 24 hours before their talk, so that Session Chairs have time to download it. Submissions are through <https://spms.kek.jp/pls/napac22/profile.html>.

All speakers are encouraged to verify their talk (especially if they include animations, or were developed on a non-Windows platform) in the Speaker Ready Room. Session Chairs will not accommodate individual laptops at the podium.

INSTRUCTIONS FOR POSTER PRESENTERS

Poster Display and Removal

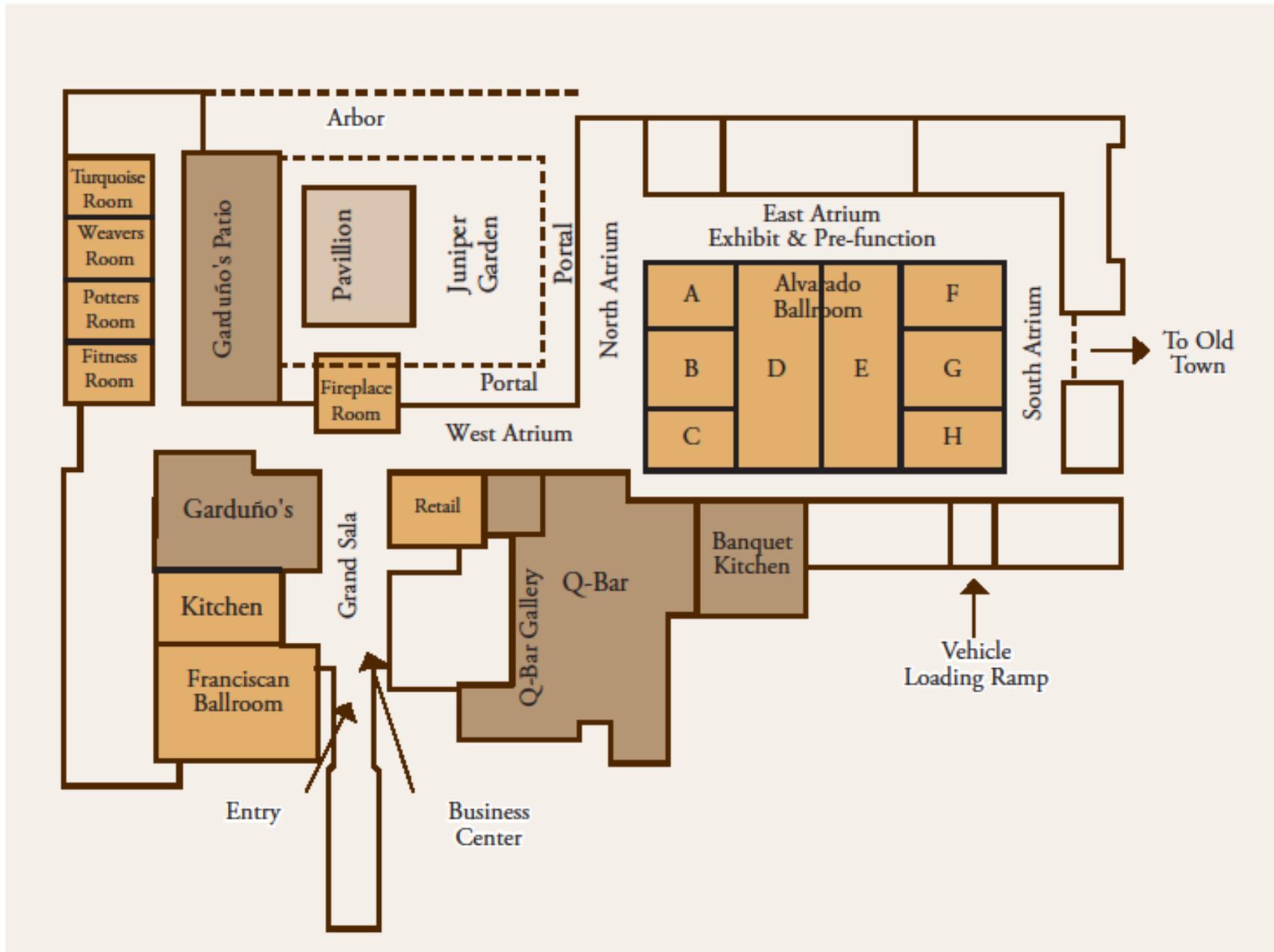
Poster Sessions are Monday through Wednesday afternoons from 4:30 to 6:00 PM, and will take place in the Alvarado ABC and North Atrium area. Poster presenters may put your poster up any time after 12:00 PM on the day of your poster session. Please set up your poster before the session begins. A single display board supports two posters (one on each side). The area available for your poster has width 7 feet and height 3.5 feet. Posters must be attended by an author on the day they are presented, according to the following schedule:

- Odd-numbered posters (e.g. MOP301) should be attended from 4:30 to 5:00 PM, and
- Even-numbered posters (e.g. TUP404) should be attended from 5:00 to 5:30 PM.

Posters must be removed promptly when the poster session is over. Any posters left following the session will be discarded.

Posters Published in the Proceedings

All work properly submitted and presented for NAPAC 2022 will be included in the conference proceedings, which will be published at the JACoW website shortly after the conference. All contributions must be uploaded via SPMS according to the electronic submission guidelines. In accordance with precedent set by prior Conferences, "posters" that are simply printouts of a paper do not satisfy the requirements for publication.





Old Town Dining

Restaurants

- 1 Sawmill Market
- 2 Church Street Café
- 3 D.H. Lescombes Winery & Bistro
- 4 Garduño's at Old Town Restaurant & Cantina
- 5 Golden Crown Panaderia (Neighborhood Bakery)
- 6 High Noon Restaurant & Saloon
- 7 Level 5 Rooftop Restaurant & Lounge - Hotel Chaco
- 8 Monica's El Portal Restaurant
- 9 Range Café on Rio Grande
- 10 Seasons Rotisserie & Grill
- 11 Shark Reef Café - ABQ BioPark
- 12 Slate at the Museum
- 13 Wild Avocado Cork & Tap - Best Western Plus Rio Grande Inn
- 14 Bike In Coffee

Wineries & Breweries

- 15 El Vado Taproom
- 16 D.H. Lescombes Winery & Bistro



Old Town Dining

Scan QR Codes for Menus

Sawmill Market

1909 Bellamah Ave NW
505-563-4473



Gardunos at Old Town Restaurant & Cantina

800 Rio Grande Blvd NW
505-222-8766



Church St Cafe

2111 Church st NW
505-247-8522



High Noon Restaurant & Saloon

425 San Felipe St NW
505-765-1455



D.H Lescombes Winery & Bistro

901 Rio Grande Blvd NW B-100
505-317-3998



Lvl 5 Rooftop Restaurant & Lounge - Hotel Chaco

2000 Bellamah Ave NW
505-318-3998



Golden Crown Panaderia

1103 Mountain Rd NW
505-243-2424



Monica's El Portal Restaurant

321 Rio Grande Blvd NW
505-247-9625



Range Cafe Rio Grande

1050 Rio Grande Blvd NW
505-508-2640



Wild Avocado Cork at Tap

1015 Rio Grande Blvd NW
505-217-1619



Seasons Rotisserie & Grill

2031 Mountain Rd NW
505-766-5100



Bike In Coffee

949 Montoya St NW
505-764-9116



Shark Reef Cafe ABQ BIO Park

2601 Central Ave NW
505-848-7182



El Vado

2500 Central Ave SW
505-361-1667



Slate at the Museum

2000 Mountain Rd NW
505-243-2220



Central Grill and Coffee House

505-554-1424



Sponsors



POC: Robin Whitehouse - V.P. of Sales
 rwhitehouse@microwavetechniques.com
 28/29 Sanford Drive, Gorham, ME 04038
 207 854 1700

Microwave Techniques is the global leader in high-power microwave components, RF solutions, and industrial microwave systems. We leverage multiple portfolio brands, legacy product lines, and operations to deliver an unparalleled line of solutions.

Components include circulators, isolators, loads, windows, rigid and flexible waveguides, coaxial components, ultra-high-vacuum (UHV) components and broadcast components. Our broad line of RF and microwave products cover WR28 to WR2300, supporting 50 MHz to 50 GHz, and handle power levels ranging from 5 W to well over 50 MW.

Industrial microwave systems and generators offer solutions for foods, liquids, and materials processing. Our system technology, plus support products and services, provide users with several processing techniques. This includes: heating, drying, tempering, cooking, pasteurizing, bonding, curing, sterilizing, extracting, and beyond.

Together, we support a myriad of cutting-edge applications, including: scientific, defense, medical, weather radar, plasma processing, broadcast, food processing, industrial heating and drying applications, and more.

A quality-driven and customer-centric approach at Microwave Techniques allows us to be a dedicated partner, and an ongoing resource for all things microwave & RF.



POC: Jessie Hanson
 info@radiasoft.net
 6525 Gunpark Dr, Suite 370-411
 Boulder, CO 80301 USA

RadiaSoft offers expert consulting and state-of-the-art software development with specialization in particle-accelerator design, large-scale optimization, control systems, and Machine Learning tools.

We also offer Sirepo, a Computer Aided Engineering gateway for running browser-based simulations for linacs, manet design, control systems, ML applications, and more

Exhibitors



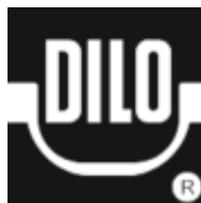
POC: Dennis Pieri
 dennispieri@bext.com
 1045 Tenth Avenue
 San Diego CA 92101
 619 239 8462



POC: William (Bill) Dodge
 bill.dodge@buckleysystems.com
 19 Turcotte Memorial Drive,
 Rowley MA 01969
 978 771 1706



POC: Erik Soiman
 erik@caentechnologies.com
 1 Edgewater St. Suite 101
 Staten Island, NY 10305
 718 981 0401



POC: Brendon Davenport
 sales@dilo.com
 11642 Pyramid Dr
 Odessa, FL 33556
 727 376 5593



POC: Dmitry Teytelman
 dim@dimtel.com
 2059 Camden Avenue, Ste 136
 San Jose, CA 95124
 650 862 8147



POC: Brian Richter, President
 brian@gmw.com
 955 Industrial Rd., San Carlos, CA 94070
 650 802 8292



POC: Rolland Johnson
 rol@muonsinc.com
 552 N. Batavia Avenue
 Batavia, IL 60510
 630 803 7802



POC: Robert Saethre
 saethrerb@ornl.gov
 1 Bethel Valley Rd.
 Oak Ridge, TN 37830
 865 590 9344



POC: Marcos Ruelas
 ruelas@radiabeam.com
 1717 Stewart Street
 Santa Monica CA 90404
 United States
 310 822 5845



POC: Douglas Eaton
 Douglas.eaton@scandinovasystems.com
 896 Loma Bonita Pl
 Las Vegas, NV 89138
 702 498 9675



POC: Andy Tydeman
 andy.tydeman@tdk.com
 405 Essex Road
 Neptune, NJ 07753
 732 795 4100