



Drs Zach Marshall and Ben Nachman  
Lawrence Berkeley Laboratory  
MS 50B5239  
1 Cyclotron Road  
Berkeley, CA 94704  
[ZLMarshall@lbl.gov](mailto:ZLMarshall@lbl.gov) and [bpnachman@lbl.gov](mailto:bpnachman@lbl.gov)

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Dear BOOST International Advisory Committee,

We would like to make a formal proposal for the Lawrence Berkeley National Laboratory (LBNL) to host the BOOST 2019 conference. LBNL has a strong background with jets, including Standard Model jet cross-section and properties measurements by the ATLAS group as well as jet studies in heavy ion collisions by the ALICE team. Furthermore, the ATLAS group has extensive experience with tracking and the interface between tracks and jets, which is an integral part of the future of boosted object tagging. In addition, the LBNL theory group has a tradition of SCET calculations and Monte Carlo (MC) techniques related to jets and parton showers. One of the major insights of the BOOST 2016 conference was the desire to have a stronger interface with MC experts. The team at LBNL as well as our colleagues at SLAC (members of the Sherpa, Pythia, and MG5\_aMC@NLO collaborations) would readily facilitate interesting discussions on this topic.

Listed below is an executive summary of our proposal. You can find more information about each of these topics in the following pages. Please note that these numbers are estimates based on recent workshops and conferences hosted at LBNL.

- Registration fee (anticipated): \$200
- Venue: LBNL (no better view in all of the San Francisco bay area), B50 auditorium.
- Meals: There are many excellent restaurants that are walking distance from Berkeley's campus (shuttle ride from LBNL), but ideally most of the lunches would happen at LBNL's excellent cafeteria (approximately \$10 for lunch and a great view).
- Hotels: There are many hotels close to campus with a variety of prices and we could also reserve rooms in the Berkeley guest house (\$140/room) that is less than 5 min. walking distance from the B50 auditorium, at LBNL.
- Possible local organizers: Christian Baur (Theory), Peter Jacobs (ALICE), Marjorie Shapiro (ATLAS), Zachary Marshall (ATLAS), Ian Mout (Theory), Benjamin Nachman (ATLAS), and Simone Pagan Griso (ATLAS)
- Travel information: LBNL is easily accessible by public transportation from either the Oakland International airport (OAK) or the San Francisco International airport (SFO).
- Size of conference room: 230 people. Many break-out rooms can be available in building 50, near the auditorium.

Thank you for considering our proposal and please let us know if you would like any further information.

Sincerely,  
Zachary Marshall and Benjamin Nachman  
*Lawrence Berkeley National Laboratory*

## Additional Information

### Anticipated registration fee

\$200 total: \$75 to cover coffee, tea, muffins, scones, etc in the mornings and coffee, tea, cookies, pop in the afternoons. The conference dinner is included (as well as transportation to the dinner), but other meals are not included. The cafeteria at the lab offers a variety of menu options for ~\$10.00. The conference room and breakout rooms can be reserved at no cost to us. Furthermore, the high speed wireless is readily available at no cost to visitors.

The Berkeley Experimental Particle Physics Center (<http://bepp.berkeley.edu>) is one of three physics centers on campus at UC Berkeley. As co-hosts for the conference, the center could provide financial assistance to students who might not otherwise be able to attend. The center attracts a number of visitors during the year and could also host a reception on campus.

### List of possible venues

BOOST would be hosted at LBNL. There is no better view of the entire bay area (including San Francisco and the Golden Gate Bridge).



*The view from LBNL. It really is this nice most of the year. To the right of the figure one can see the foot of the Golden Gate Bridge and Alcatraz Island.*

There are a number of options on campus at UC Berkeley, but in order to keep registration costs to a minimum we are proposing to host the conference itself at the lab.

## Conference Rooms

The main auditorium in Building 50 at LBNL is a short walk from the shuttle. It seats 230 and has AV equipment (microphones, projector, and so on) available.



*The building 50 auditorium, where the main sessions of the conference can be held. More information and other pictures can be found at [http://eic2008.lbl.gov/Other%20Docs/50\\_aud.htm](http://eic2008.lbl.gov/Other%20Docs/50_aud.htm)*

There are other auditoriums that could be reserved on campus for a modest fee (up to \$20/participant/week).

Other rooms in Building 50 and in nearby lab buildings of various sizes can be made available to the participants for breakout sessions or for any meetings that might be required during the conference.

Fast public wireless internet is available thoroughly LBNL, including in the B50 auditorium.

### Travel information

LBNL is easily accessible by public transportation from either the Oakland International airport (OAK) or the San Francisco International airport (SFO). The Bay Area Rapid Transit (BART) connects both airports to downtown Berkeley and there is a free LBNL shuttle that runs from that BART stop to LBNL. There are direct flights between SFO and Zurich (Swiss) as well as Frankfurt (Lufthansa) in addition to many flights with one stop in the middle. Furthermore, there are many direct flights between the US East Coast and the bay area.

### Accommodations

LBNL has a guest house on campus that has rooms available from about \$140 for a single en suite. Some double rooms are also available. The conference will be able to block a set of rooms for the participants. Unfortunately, there is no evening food service at the labs, so dinner needs to be off campus, but the view in the evening is hard to beat.



*The view from the LBNL guest house in the evening.*

A wide variety of hotel options are also available in Berkeley. These range from fairly cheap \$75/night motels a bit further from the lab to \$100-150/night hotels a short walk from the LBNL shuttle (a 10-15 minute ride up the hill, and the shuttles run every 15 minutes during the day) to rather luxuriant spots. Some hotels have government rates available. Websites like hotels.com and booking.com frequently offer better deals than can be had for an academic event, but there are a sufficient number of hotel rooms in the area that the BOOST conference would not create any competition or room shortage.



### Possible Outings

There are a number of options for outings, and rather than restrict all the participants to a single destination we would prefer to arrange smaller groups that could enjoy different sights.

The San Francisco Exploratorium (<http://exploratorium.edu>) is a science and art museum along the waterfront. They have a variety of interesting exhibits, as well as a number of changing exhibits during the year. The entry fee is \$30, and discounts are available depending on the size of the group.

The California Academy of Sciences (<http://www.calacademy.org>) is a science and natural history museum with a large aquarium and planetarium. It also features a number of changing exhibits during the year. The entry fee is \$30 for groups, and a variety of tours are available.

Alcatraz Island ([https://en.wikipedia.org/wiki/Alcatraz\\_Island](https://en.wikipedia.org/wiki/Alcatraz_Island)) is a historical fort and prison in the middle of the bay. A visit to the island includes an audio tour of the prison and its history, as well as the settlements that once were there. The tour price is \$41 per person, including the boat ride to the island.

### Possible Conference Dinner Options

As the excursions all take the participants to downtown San Francisco, the conference dinner can be arranged nearby. There is a wide variety of options available, but two of the most popular for such dinners are the Hornblower cruises (<https://www.hornblower.com/port/overview/sf+dinnerdance>), which includes a cruise around the bay along with dinner and drinks, or Foreign Cinema (<http://www.foreigncinema.com/private-dining/>), a restaurant that is well-equipped to host large events like ours.

### Potential Local Organizers

All of the LBL scientists listed in the executive summary have extensive experience with the experimental or theoretical aspects of jets. We have made contact with all of them and they are enthusiastic about this proposal. We are happy to provide more detailed information about each person's background as requested.